

**Predictors of Primary Caregiving for Young Children among New Zealand
Fathers**

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Table of Contents

Table of Contents	2
List of Tables	4
Acknowledgements.....	5
Abstract	6
Section 1: Introduction.....	7
<i>Primary caregiving fathers</i>	<i>7</i>
<i>Rationale and background of the current study.....</i>	<i>7</i>
<i>Theoretical basis of this study</i>	<i>12</i>
<i>Review of previous literature.....</i>	<i>13</i>
<i>Developmental history</i>	<i>14</i>
<i>Personal characteristics.....</i>	<i>16</i>
<i>Demographic characteristics.....</i>	<i>16</i>
<i>Beliefs about fathering</i>	<i>19</i>
<i>Parenting self-efficacy and parenting satisfaction</i>	<i>22</i>
<i>Marital relationship.....</i>	<i>23</i>
<i>Work and economic factors.....</i>	<i>25</i>
<i>Social network</i>	<i>28</i>
<i>Child characteristics.....</i>	<i>29</i>
<i>Gender.....</i>	<i>30</i>
<i>Age and number of children.....</i>	<i>30</i>
<i>Parenting behavior</i>	<i>31</i>
<i>Multiple determinants of primary caregiving.....</i>	<i>31</i>
<i>Methodology and gaps in the literature</i>	<i>33</i>
<i>The current study.....</i>	<i>36</i>
Section 2: Method.....	38
<i>Participants.....</i>	<i>38</i>
<i>Recruitment</i>	<i>38</i>
<i>Procedure.....</i>	<i>40</i>
<i>Measurement</i>	<i>41</i>
<i>Developmental history.....</i>	<i>42</i>
<i>Personal characteristics.....</i>	<i>43</i>
<i>Marital relationship</i>	<i>45</i>
<i>Work and economic Factors</i>	<i>46</i>

Social network	46
Child characteristics	47
Statistical analyses.....	48
Section 3: Results.....	49
<i>Sample Characteristics</i>	49
<i>Parenting behaviour</i>	49
<i>Time responsible for childcare</i>	49
<i>Developmental history</i>	50
<i>Personal characteristics</i>	51
<i>Ethnicity</i>	51
<i>Age</i>	53
<i>Education</i>	53
<i>Beliefs about the role of the father</i>	56
<i>Parenting self-efficacy and satisfaction</i>	56
<i>Marital relationship</i>	57
<i>Work and economic variables</i>	57
<i>Social network</i>	59
<i>Child characteristics</i>	59
<i>Predictors of primary caregiving status</i>	60
Section 4: Discussion	63
<i>Summary of findings</i>	63
<i>Comparison of results with findings of previous research</i>	64
<i>Theoretical implications of the current findings</i>	69
<i>Limitations of the current study</i>	70
<i>Strengths of the current study</i>	72
<i>Implications of the current findings and areas for future research</i>	73
References.....	78

List of Tables

Table 1: Comparison of the percentage of time responsible for childcare, by primary-caregiving fathers and their partners, and secondary-caregiving fathers and their partners: means and standard deviations	50
Table 2: Comparison of responses on the PBI, care subscale, for mother, father, and both parents, by primary- and secondary- caregiving fathers.....	51
Table 3: Comparison of ethnicity (number and percentage) of primary- and secondary-caregiving fathers.....	53
Table 4: Comparison of highest educational qualifications across primary- and secondary-caregiving fathers: number and percentage	55
Table 5: Comparison of highest educational qualifications of partners of primary caregiving fathers and partners of secondary caregiving fathers	56
Table 6: Comparison of responses by primary- and secondary- caregiving fathers on the ROFQ, PSOC efficacy and satisfaction subscales, and Locke-Wallace MAT.....	68
Table 7: Comparison of primary- and secondary-caregiving fathers on economic variables of household income, participant's and partner's income and hours worked per week	60
Table 8: Comparison of responses by primary- and secondary-caregiving fathers to the PSI, support and satisfaction subscales	61
Table 9: Comparison of child characteristics of number of children and gender of children across primary- and secondary-caregiving father groups	62
Table 10: Summary of Logistic Regression analysis for variables predicting primary caregiving status by all participating fathers (N = 70).....	64

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Abstract

Around 14,000 men in New Zealand are the primary caregiver for their children, yet little recent research has focused on this phenomenon. Seventy fathers were recruited from the community, consisting of 35 primary-caregiving fathers, and 35 secondary-caregiving fathers. Participants completed a variety of measures which gathered data about their developmental history, personal characteristics, marital relationship, work and economic factors, social network factors, and child characteristics. Results indicated that primary-caregiving fathers earned significantly less income than secondary-caregiving fathers; were significantly more likely to identify with non-Pakeha ethnicity, and were significantly more likely to have no educational qualifications than secondary-caregiving fathers. Primary-caregiving fathers also rated their relationship with their mother as having significantly more care. Primary-caregiving status was predicted by older age of fathers, and increased parenting self-efficacy. Implications of the results are discussed, as are strengths and limitations of the study, as well as future directions for research.

Section 1: Introduction

Primary caregiving fathers

Primary caregiving involves taking on the primary responsibility for the care of another. In the case of parents, a primary caregiving parent is typically the person who takes care of a child or children most of the time, and the person who must be available to attend to a child's needs (Bonney, Kelley, & Levant, 1999).

In New Zealand, 24.5% of men and 32% of women report caring for a child in their own household, while 10.2% of men and 18.6% of women report caring for a child living outside their household (Fursman & Callister, 2009). A father taking on the role of primary caregiver for their children is much less common in New Zealand than a mother taking on this role— for every one man in New Zealand who reports looking after children while not being in the labour force, there are ten women.

While 3.4% of New Zealand families have a stay-at-home father, 38% of families in New Zealand have a stay-at-home mother (Chapple, 1994). The prevalence of primary-caregiving fathers in New Zealand has increased from 2.6% in 1986 to a peak of just under 5% in the early 2000s, and two years ago it was estimated that around 3.4% of families in New Zealand have a father at home full-time and a mother in paid work outside the home, with 14,000 primary caregiving fathers in New Zealand (Fursman & Callister, 2009).

Rationale and background of the current study

Historical shifts, including increasing female participation in the labour force, general instability in modern economies contributing to increased instability in job

fields traditionally dominated by men, as well as increasing social pressure on fathers to provide nurturance as well as economically provide for their children, has led to an increase in the amount of childcare fathers provide since the 1960s (Fisher, McCulloch & Gershuny, 1999, as cited in Lewis & Lamb, 2007). Reviews of time-diary studies conducted in the 1980s and the late 1990s point to an increase in the time fathers spend involved in care for their children (Pleck & Masciadrelli, 2004). Primary caregiving by fathers has also increased over the past three decades (Pleck & Masciadrelli, 2004).

Increasingly men are expected to be more actively involved with their children (Bonney, et al., 1999). This may also reflect a shift in the internal values of many fathers (Levant, 1992; Pleck & Masciadrelli, 2004). Concerns developed during the 1960s and 1970s about father absence, and the feminist movement of the 1960s also raised social concerns about whether fathers were adequately helping to reduce the childcare workload of employed mothers (Pleck & Masciadrelli, 2004). Some researchers argue that dual-parenting in families, with men taking equal responsibility for childcare as women, will also help women in achieving equality with men (Callister, 1995).

Research indicates that the traditional role of fathers as secondary caregivers for children often continues even when mothers are employed outside of the home (Frank, 1995), and the literature consistently finds that men provide significantly less care for children than women (Fursman & Callister, 2009). International time use surveys indicate that the ratio of male to female time spent in childcare in families where both parents work varies by country, from a ratio of 1.9 in the US and Sweden

to 2.7 in Italy (Fursman & Callister, 2009). Frank (1995) found that secondary-caregiving fathers spent less time with children than secondary-caregiving mothers, while primary-caregiving mothers and primary-caregiving fathers spent equal time with children.

A recent Department of Labour report (2009) states that despite population factors such as growth in the numbers of unemployed men and in men looking after children, the percentage of men as full-time caregivers for children has increased at a slower rate than expected, and there is little research to explain why (Fursman & Callister, 2009). Men being more involved in caregiving, and taking on a primary caregiving role for children can result in lowered demands on women to take the majority of responsibility for childcare, thus allowing women to work full or part-time. This has many possible beneficial effects, such as less pressure on men to support families financially, with more flexibility to take time out of the workforce for caring, sickness, redundancy or job changes. This may be especially beneficial for men in more economically unstable careers, such as housing and management, which are disproportionately staffed by men (Fursman & Callister, 2009). It may also improve work-life balance for families, and assist men who wish to be more involved with their families (Fursman & Callister, 2009). Research focused on primary caregiving fathers has the potential to increase understanding of family processes, as well as a greater understanding of fathering in general (Russell, 1999).

Unequal distribution of childcare, with men responsible for less childcare than women, has significant implications for the New Zealand labour force and economic success of families, including implications for workplace policies, parental leave,

governmental policy, and social support providers (Fursman & Callister, 2009). In order to meet caregiving requirements, many women scale back their involvement in paid work, resulting in reduced earnings of families (Fursman & Callister, 2009). This ‘mommy tax’ (Gornick & Meyers, 2008, as cited in Fursman & Callister, 2009) not only reduces family income and lifetime earnings, and weakens female human capital and skills, but is especially disproportionate with educational achievement, as less men than women in New Zealand graduate from tertiary study (Birks, 2005). It would therefore make economic sense in many New Zealand families for men to take on more caregiving responsibilities for children.

Anecdotal evidence suggests that social service providers are not always adequate in including fathers in their parenting services (Anonymous, 2010). Almost 20 years ago McBride and Mills questioned: “How can early childhood and parent educators better prepare fathers in dual-earner families to assume a more equitable role in raising their young children?” (McBride & Mills, 1993, p. 473), and this question is still far from being answered. Mitchell and Chapman (2006) report that social service providers often treat fathers as a secondary parent, and supporter for the mother, rather than as a co-parent in their own right (Mitchell & Chapman, 2006). More information about the characteristics of primary caregiving fathers would help social support providers to more adequately support these fathers.

The role of primary-caregiving fathers has received relatively little attention in the literature (Frank, 1995), and research in this area has become sparse since a period of heightened interest in primary-caregiving fathers occurred in the 1970s and 1980s (Russell, 1999). No published studies have compared and contrasted the

characteristics of primary-caregiving fathers with their secondary-caregiving counterparts, or aimed to quantitatively identify predictors of primary caregiving status, and the characteristics of this population are as yet unknown. Most research on primary-caregiving fathers has been of a qualitative nature, and less recent quantitative research is available, with the majority of this research having been conducted a generation ago. Most research has focused on assessing the precipitating factors associated with fathers taking on the primary caregiving role, while a more objective analysis of the characteristics of this population has been ignored.

Unlike primary caregiving by fathers, father involvement has been the focus of multiple studies (Russell, 1999). Father involvement refers to what fathers do as parents, and their role in the care and socialization of children (Pleck & Masciadrelli, 2004). Father involvement emerged as a focus of research from the 1980s, and much of the research has been guided by Lamb and colleagues' (1987) conceptualization of three areas of father involvement: interaction, accessibility, and responsibility for childcare. However, this narrow definition has led to other aspects of father involvement, such as primary caregiving, being ignored by the recent research literature (Lamb & Lewis, 2004).

Higher father involvement has many beneficial effects. In a review of studies assessing the consequences of high paternal involvement for children, Pleck and Masciadrelli (2004) found that 10 of 14 studies controlling for maternal involvement found that paternal engagement was associated with positive outcomes among children, adolescents and young adults. Based on these findings, promoting father

involvement, for example primary caregiving by fathers, may have beneficial effects for children, fathers, and the parental relationship.

This study aims to research multiple characteristics and determinants of primary caregiving by fathers, focusing attention on a relatively ignored aspect of fathering and parenting, using a sample of New Zealand fathers.

Theoretical basis of this study

As the study of fathers occurs across multiple social science domains, large numbers of theories have appeared in previous research, as well as many authors attempting to take an atheoretical perspective (Lewis & Lamb, 2007). Lamb and Lewis (2007) have identified a need for a sound theoretical basis of research. Role theory has been used to guide multiple studies into primary caregiving by fathers. Role theory suggests that fathers' behaviour is based on an internal concept of appropriate paternal behaviour, influenced by cultural norms and individual beliefs (Boss et al., 1993). Parenting behaviour could also be influenced by men's beliefs about appropriate gender roles. However, empirical findings do not lend much support to role theory as being crucial in primary caregiving (Russell, 1999). Other theories which have focused specifically on explaining parenting behaviour have not been used in research on primary-caregiving fathers.

Belsky's (1984) process model of the determinants of parenting has been a core component of research aimed at identifying factors influencing father involvement in childcare, but has yet to be used to guide research on primary caregiving fathers (McBride & Rane, 1998). Belsky's model postulates that there are multiple

determinants of parenting, including the domains of a) the developmental history of the father, b) the personal characteristics of the father, and c) contextual sources of stress and support, including the marital relationship, work and economic factors, social network, and child characteristics (Belsky, 1984). This study will use Belsky's model, and its theorized determinants of parenting to explore why fathers become the primary caregiver of their children. While many theories of parenting exist, Belsky's theory was chosen as it has been used widely in previous research on fathering, is widely known, and has empirical support (McBride & Rane, 1998).

Belsky's model theorizes that childrearing history impacts on parenting through its' influence on father characteristics. Father characteristics then influence, and are influenced by, contextual sources of stress and support, including work and economic factors, the quality of the relationship with the spouse or partner, and the wider social network. Characteristics of the child being parented also influence parenting in Belsky's model. These domains are then theorized to be multiple determinants of parenting behaviour. This study will measure the domains of Belsky's model: a) developmental history, b) personal characteristics of the father, c) marital relationship, d) work and economic factors, e) social network, and f) child characteristics.

Review of previous literature

Due to the lack of research into primary-caregiving fathers, the available literature on primary caregiving has been extended to relevant literature focused on highly involved or highly responsible fathers, for the purposes of this literature review.

Variables identified in the study of primary caregiving fathers, high levels of father

involvement, and father responsibility for childcare are reviewed in the following section.

The relevant research has been categorized utilizing Belsky's theory of the determinants of parenting, with previous research falling under the categories of developmental history; father characteristics, including demographic characteristics, beliefs, parenting self-efficacy and satisfaction; and contextual sources of stress and support, including marital relationship, work and economic factors, social network, and child characteristics. Methodology and gaps in the literature are also discussed, as are hypotheses of the current study.

Developmental history

An individual's experience of being parented, or developmental history, can influence much of the individual's later parenting behaviour (Marsiglio, Amato, Day, & Lamb, 2000). Sons may model their own father's parenting and level of parenting responsibility if they have perceived the relationship as positive, or become highly participant in childcare as a reaction to their own father's lack of involvement (Russell, 1999). Evidence for both the former view (Radin, 1981; Sagi, 1982) and the latter (DeFrain, 1979; Eiduson & Alexander, 1978) has emerged. However, much of the evidence points to a relationship between some experience of being parented, be it positive or negative, and high levels of father involvement, including primary caregiving.

Pruett (1987) studied 17 families where fathers had the 'major responsibility' for parenting. All fathers had been parented traditionally, with a mother as the primary

caregiver. Pruett argued that the timing of participants' decision to be the primary caregiver was associated with their relationship with their own father, with the majority who decided before conception to be a primary-caregiving father reporting distant or uninvolved fathers, while the majority of participants who decided after birth reporting available and positive relationships with their fathers. In Pruett's sample, therefore, there is evidence for both theories, with little evidence of a middle group (Pruett, 1987).

Primary-caregiving fathers of preschoolers in Radin (1981) had significantly more experiences of mothers who returned to the workforce before participants had reached adolescence than did secondary-caregiving fathers. There was little evidence of a link between participants' views of their own father, and their own childcare behavior. A study of Israeli primary-, secondary-, and shared-caregiving families found that fathers' involvement was significantly correlated with their own father's involvement (Sagi, 1982). Sagi (1981) concluded that fathers were modeling their own father's involvement in their parenting behavior (Radin, 1995). Merla's (2008) qualitative analysis of 21 Belgian primary caregiving fathers found that around half stated that they wanted to replicate their mother's high level of involvement in their upbringing by being a primary caregiver themselves (Merla, 2008).

West et al's (2009) qualitative study of 25 British primary-caregiving fathers of infants found that 76% of participants reported reasons for taking on the primary-caregiving role related by authors, using thematic analysis, to experiences of their own parent's parenting. One-fifth (20%) of these participants rated their relationship with their father as emotionally close, while higher percentages rated their father as

emotionally distant (32%) or absent (24%). More rated their mothers as emotionally close (28%), while smaller percentages rated their relationship with their mother as emotionally distant (16%) or absent (8%). The effect of a primary-caregiving father's own parent or parents being emotionally distant or physically absent appeared to the authors to result in a 'reactive determination' to do things differently in their own parenting, and a positive relationship with parents led to a determination to be similarly present and caring with their own children (West et al., 2009).

Based on the previous research, it is proposed that primary-caregiving fathers will report experiencing relationships with both or either of their parents with higher care than secondary-caregiving fathers, and that higher care in participant's reported experience of being parented will predict primary caregiving for children.

Personal characteristics

Personal characteristics of fathers have been assessed by multiple studies of primary-caregiving and highly-involved fathers, and while some studies have found personal variables significantly related to father involvement or primary caregiving by fathers, other studies have not found significant relationships.

Demographic characteristics

Age

Age of fathers has not been consistently related to parenting behavior; while older age of fathers was related to less accessibility to their children in McBride (1991), it was related to more involvement in Volling and Belsky (1991). A Swedish study

reported that ages of primary- and secondary-caregiving fathers were similar overall (Lamb, Frodi, Hwang, Frodi, & Steinberg, 1982).

Education, occupation and income

Some studies have related higher levels of education, higher incomes, and more prestigious occupations among fathers to increased involvement in childcare, as well as primary caregiving for children, while other studies have found no such relationships. More educated fathers, with occupations classified as more prestigious, and with higher incomes were likely to provide care more often for their infants in a longitudinal study of dual-earner families (Volling & Belsky, 1991). Among 209 Israeli parents of preschoolers, education was positively correlated with the amount of time fathers were the sole provider of care for their children, while income was negatively correlated with fathers providing childcare (Gaunt, 2005). Contrary to this, the US National Survey of Families and Households found that increased education, and increased income were both related to increased time spent with children by fathers (Cooksey & Fondell, 1996). Rane and McBride (2000) found that no demographic variables were significantly correlated with total father involvement, including paternal education or maternal education. A study of parents in the United States showed that the amount of tertiary education was not significantly related to father involvement (McBride et al., 2005).

Among primary-caregiving fathers, findings are similarly mixed. Russell's analysis of Australian primary-caregiving fathers found that primary-caregiving fathers and their partners were more highly educated on average than families in which the father was the secondary caregiver (Radin, 1995). However, Lamb et al. (1982) reported

that primary-caregiving and secondary-caregiving fathers were similar in occupational status, and Pruett reported that socio-economic status had no role as an antecedent of primary-caregiving (Pruett, 1987).

Lewis et al.'s (2008, in press, as cited in West et al., 2009) qualitative study of primary-caregiving fathers found no systematic differences in educational level, partners' education level, or partners' occupational status between primary-caregiving fathers and secondary-caregiving fathers. Primary-caregiving fathers however, did have significantly lower occupational status compared with secondary-caregiving fathers, and provided a lower proportion of the family income. Lower pay and status may have motivated primary-caregiving fathers to leave work to assume the main caregiving role, or conversely lower pay and status may be a result of time taken out of the workforce to care for children.

Ethnicity

The US National Survey of Families and Households found differences by ethnicity in father involvement: African-American fathers were more likely to spend time talking with their children, or helping with homework, than European fathers, while Hispanic fathers were more likely to engage in leisure activities than European fathers (Cooksey & Fondell, 1996). Other studies have found that ethnicity was unrelated to paternal engagement (Pleck & Masciadrelli, 2004). Inferences are difficult to make from US research, due to NZ's unique ethnic makeup. Callister (1995) reports that families with a Maori parent are more likely to have 'non-traditional' childcare arrangements, with fathers taking primary- or shared-caregiving responsibilities. Callister (1995) reports that families with both parents of Maori

ethnicity are most likely to have this family pattern, families with one Mori parent less likely, and families with both parents of non-Maori ethnicity least likely of all. However, as Callister reports this data as being from 20 years ago, and as no study focused on primary caregiving by fathers has assessed ethnicity, hypotheses are difficult to generate.

Older age, higher education, and higher income was initially positively correlated with increased father involvement in Volling and Belsky's (1991) sample of single-earner and dual-earner households. However, in a multiple regression analysis, these factors did not significantly predict father responsibility for childcare, when significant predictors of father characteristics including marital quality and work stress were controlled for (Volling & Belsky, 1991). It may be that the relationship between demographic details and parenting behavior, including primary caregiving, is accounted for by factors such as father characteristics, marital, and developmental history. Overall, previous research finds no consistent relationships between father involvement and socio-demographic variables, including ethnicity, income, education and age (Pleck & Masciadrelli, 2004).

This study predicts that ethnicity and education will not differentiate between primary-caregiving fathers and secondary-caregiving fathers, while it is likely that older age will be related to increased likelihood of primary-caregiving status.

Beliefs about fathering

Fathers' beliefs about the correct role of the father, and how involved fathers should be in childcare, are important in explaining the extent of father's responsibility for

childcare. 'Non-traditional' beliefs about fathers generally refer to views that fathers are capable caregivers, should be involved in childcare, and are important in a child's development (Palkovitz, 1984). Studies have found that men with less traditional beliefs about fatherhood report greater involvement in childcare than men with more traditional beliefs (Jacobs & Kelley, 2006; Pleck & Masciadrelli, 2004).

Among 89 American fathers of preschool children, higher endorsement of non-traditional beliefs by fathers was significantly positively correlated with increased father responsibility for childcare (McBride & Rane, 1998). Less traditional beliefs about the role of the father in childcare were significantly positively correlated to the amount of time fathers spent as the primary-caregiver for their child among 119 dual-earner parents of preschoolers using outside childcare (Jacobs & Kelley, 2006). West et al. (2009) reported in their qualitative analysis of British primary-caregiving fathers that participants reported a willingness to reject cultural norms and stereotypes about the correct role of the father in the family and in childcare.

However, other studies have found beliefs about fathering were not significantly related to high levels of father involvement, including primary caregiving. Beliefs about the role of the father were not significantly related to responsibility for childcare in McBride et al. (2005). Among 50 American fathers with a preschool child, fathers with employed spouses endorsed significantly more non-traditional beliefs about the role of the father. However, beliefs about the role of the father did not significantly predict total father involvement (Gaertner, Spinrad, Eisenberg, & Greving, 2007)

One of the main reasons reported by primary-caregiving fathers in Russell (1989) for their family childcare arrangement was a belief that both parents should be involved in childcare. Primary-caregiving fathers' behaviours reflected this, as when compared to secondary-caregiving father families, more fathers in the primary-caregiving father group had attended the birth of their child and childbirth classes, and read books on childrearing. Primary-caregiving fathers and shared-caregiving fathers were also more likely than secondary-caregiving father families to agree that fathers could be as capable caregivers as mothers (Russell, 1989). Grbich (1995) reported that the main explanation given for primary-caregiving by fathers was a desire to be involvement in household work and childcare (Grbich, 1995). Geiger's (1996) sample of primary-caregiving fathers reported views that shared childcare was the only fair arrangement, and endorsed more non-traditional beliefs about the role of the father (Gieger, 1996).

Merla (2008) reported that almost all primary-caregiving fathers reported a desire to prioritize family and quality of life, and also endorsed the view that parents should care for children, rather than relying on outside childcare. However, Merla (2008) reported that these views also interacted with economic concerns; specifically, mother's income and job prospects also influenced fathers fulfilling the primary-caregiving role. Some studies have found that primary-caregiving fathers were less career oriented, and less constrained by needing to be the family's main income earner than secondary-caregiving fathers (Gieger, 1996; Grbich, 1995). Primary-caregiving father families and secondary-caregiving father families in Lamb et al. (1982) had differences in values; Lamb et al. reported that primary-caregiving fathers

valued parenthood more and work less than their wives, while the opposite pattern was true in secondary-caregiving father families.

Parenting self-efficacy and parenting satisfaction

Increased self-efficacy in the parental role is related to increased paternal involvement in childcare (Sanderson & Thompson, 2002). Men who are involved as fathers feel more self-confident and effective as parents (Allen & Daly, 2007; De Luccie, 1996) and find parenthood more satisfying (Owen, Chase-Lansdale & Lamb, 1982, as cited in Allen & Daly, 2007). Fathers who participated in a parent education class rated their parenting efficacy and parenting satisfaction significantly higher than a control group after participating in the intervention (McBride, 1991).

Responsibility for childcare was significantly correlated with parenting efficacy and parenting satisfaction (McBride, 1991). Jacobs and Kelley (2006) found that parenting self-efficacy predicted fathers' responsibility for childcare. In a hierarchical multiple regression analysis, higher non-traditional beliefs about the role of the father, and increased parenting satisfaction and parenting efficacy, as well as mothers' higher work hours predicted time fathers spent as the primary caregiver initially. Once all measured variables were entered into the equation, only fathers' parenting efficacy and mothers' work hours were significantly predictive of fathers' time as the primary caregiver (Jacobs & Kelley, 2006). Similar findings were discovered in predicting time fathers were responsible for childcare: while non-traditional beliefs were initially predictive, once all variables were entered, only efficacy, mothers' work hours, and fathers' work hours were significant predictors.

Studies of primary-caregiving fathers have had similar findings. Eighty-eight percent of primary-caregiving fathers in West et al. (2009) reported being positively motivated or confident in the caregiving role, or getting enjoyment from it. Other important factors included a belief in the importance of parents caring for children; and a readiness to reject cultural norms and stereotypes, especially around gender roles and shared childcare. Russell (1989) found that primary-caregiving fathers rated themselves more highly than secondary-caregiving fathers on parenting self-efficacy, self-confidence in handling children and their problems, and ability to understand children and their needs. Russell (1989) theorized that primary-caregiving may have changed these fathers' beliefs about their role and increased their feelings of competence. Pruett (1987) found that expertise did not determine primary caregiving status, as all 17 primary-caregiving fathers had relatively little experience with young children before taking on the primary-caregiving role, meaning that parenting self-efficacy is not necessarily a pre-requisite to taking on the primary caregiving role (Pruett, 1987).

Based on these findings, it is proposed that primary-caregiving fathers will endorse significantly more non-traditional views about the role of the father than secondary-caregiving fathers, and report higher parenting self-efficacy. Beliefs about the role of the father and parenting self-efficacy are proposed to predict primary-caregiving status.

Marital relationship

The quality of parents' relationships with each other has been identified as a possible predictor of father involvement in childcare, and a predictor of the amount of

responsibility fathers take for childcare. Primary-caregiving by fathers could reflect increased marital quality as support from fathers may enable mothers to work, due to paternal responsibility for childcare. Fathers may be more involved in childcare, due to maternal support (Russell, 1999).

However, studies have found conflicting results with regard to marital quality; while Lewis (2000, as cited in Lewis & Lamb, 2007) found that in dual-earner families, increased paternal involvement was related to lower marital satisfaction, other studies have found that increased paternal involvement in childcare was related to increased marital satisfaction of mothers (Brennan, Barnett, & Gareis, 2001).

Marital quality predicted fathers' later involvement with their infants in Volling and Belsky (1991). Men who reported loving their partner, and trying to enrich their relationship with their partner before the birth of their child were observed to be more stimulating and affectionate fathers to their child six months later. Higher perceived relationship quality by fathers, as well as more positive and less negative relations with their partner, predicted fathers' increased responsibility for childcare, in single-earner families, six months later, as well as more responsive and stimulating parenting behaviour by fathers (Volling & Belsky, 1991). A review by Pleck (1997, as cited in Russell, 1999) stated that high paternal involvement was related to good marital relationships.

Russell (1983, as cited in Russell, 1999) found that primary-caregiving fathers reported lower relationship satisfaction than secondary-caregiving fathers, but in a sample of fathers who had chosen a shared caregiving role no significant marital

satisfaction differences were found when compared to a traditional sample (Russell, 1999). Russell's (1983) sample was asked to reflect retrospectively on the consequences to the marital relationship of fathers taking on the primary-caregiving role. While 45% reported that there had been positive consequences for their relationship with their partner, 40% reported that there had been negative consequences for their relationship (Russell, 1983 as cited in Russell, 1999).

Based on these findings, it is proposed that higher marital quality reported by participants will predict more involvement in childcare, in the form of primary caregiving status.

Work and economic factors

Earning potential is an important factor in the decision-making process around who takes on the role of primary caregiver for a child. It makes economic sense for the parent with the lower potential income to take time out of employment to care for a child. Among 205 Dutch two-parent families with preschool children, Van Dijk and Siegers (1996) found that the more money mothers could earn for each hour of employment, the less time was spent in childcare. Fathers spent more time in childcare as their partner's earning potential increased, and non-parental care was also more utilized (Van Dijk & Siegers, 1996). Increased potential wages of fathers significantly increased time mothers spent in childcare, but fathers' potential wages had no effect on their own time spent providing childcare, or on the use of non-parental care. The cost of outside childcare was not a significant predictor, but having more available childcare choices increased the time children spent in care (Van Dijk & Siegers, 1996)

Mothers' and fathers' work hours significantly correlated with total father involvement, in a sample of 30 families with toddlers (McBride et al., 2005). Among 120 American couples with a preschool child, the more hours mothers worked outside the home predicted increased time spent by the father as the child's primary caregiver (Bonney, et al., 1999). Jacobs and Kelley (2006) found that increased hours mothers worked outside the home predicted increased time spent by fathers as the primary caregiver, as well as increased responsibility for childcare. McBride (1991) found that fathers with higher family incomes were less involved in childcare, while fathers with employed spouses were more responsible for childcare than those with an unemployed spouse.

McBride and Mils (1993) found that while hours of mothers' employment had a significant negative relationship with mothers' involvement in childcare activities, no relationship was found between hours of fathers' employment and fathers' involvement in childcare. However, fathers from dual-earner families did report greater involvement and responsibility than fathers in single-earner families. Fathers' involvement was still significantly lower than that of mothers, pointing to a 'second-shift' phenomenon, where working mothers are still required to assume most of the responsibility for childcare on returning from work (McBride & Mills, 1993)

Brayfield (1995) found that while multiple aspects of mothers' work, including hours worked each week, weekend work, and working shifts other than the day shift, were related to fathers' time spent as the primary caregiver, the only aspect of fathers' work significantly related to primary-caregiving was working non-day shifts, which

predicted significantly increased primary-caregiving for both pre-school and school-age children. Fathers who worked non-day shifts were significantly more likely to provide primary-caregiving for pre-school children, while fathers who worked the day shift were significantly more likely to provide primary-caregiving for school-age children (Brayfield, 1995).

Russell's sample of primary-caregiving fathers reported four main reasons for fathers taking on shared primary caregiving responsibilities, three of which related to economic or work factors, including mothers' job factors, fathers' unemployment, desire or requirement for income generated from two parents working, or desire of the mother to pursue her career (Russell, 1999). Employment reasons for fathers taking on the primary-caregiving role were coded in 84% of participating primary-caregiving fathers' responses in West et al. (2009). These included unemployment of the fathers, flexibility of fathers' work, mothers' work factors, and fathers' dislike of their job. Half of participants reported economic factors in the decision to act as the primary caregiver for their children, including the need for two salaries, and mothers' greater earning power (West, et al., 2009). Radin's qualitative analysis of 17 primary-caregiving fathers found that one-third reported that losing their job had necessitated them taking on the primary-caregiving role instead of their partner, who was still employed. The primary-caregiving fathers' group largely had spouses who indicated a desire to work (18 of 20), whereas only one of twenty primary-caregiving mothers indicated a desire to work.

Merla's (2008) qualitative analysis of Belgian primary-caregiving fathers found that participating fathers' partners' successful job prospects were often mentioned as a

reason for fathers acting as the primary caregiver. The mother's willingness to work was often reported as a factor in primary-caregiving fathers' decision to stay home; when the mother's employment situation appeared more satisfying, secure, or rewarding, parents agreed that fathers would stay at home (Merla, 2008). Doucet's (2004) qualitative analysis of 70 Canadian primary-caregiving fathers found that most fathers were still connected to work, either working part-time, studying, volunteering, or working on a new career direction (Doucet, 2004).

Based on these findings, it is hypothesized that primary-caregiving fathers will work less hours, and earn less income than their secondary-caregiving father counterparts.

Social network

Belsky's theory hypothesizes that a parent's social network represents a contextual source of stress and support, impacting on parenting. Studies with samples of primary caregiving fathers have highlighted difficulties reported by primary-caregiving fathers in accessing social support (Russell, 1999). Russell (1999) argues that fathers who stay at home with their children may be even more socially isolated than mothers at home. West et al.'s (2009) participants reported experiencing some societal pressure against paternal caregiving. Merla's (2008) analysis of Belgian primary-caregiving fathers found that all participants had experienced negative remarks and reactions from others at some time about their role as the primary-caregiver for their children. More than half of participants (15 of 21) reported isolation or a lack of social integration with parenting and school groups, and 18 of 21 fathers reported difficulty in relationships with male friends and acquaintances, such as feeling distant from other men, and difficulties continuing pre-primary-

caregiving activities (Merla, 2008). Experimental studies have also found highest support for ‘traditional’ fathers from community samples, when compared to primary-caregiving or single fathers (Wilson & Johnson, 2010) .

Interpersonal support has been identified in numerous studies as a key determinant of effective parenting, and father involvement in childcare (DeGarmo, Patras, & Eap, 2008). Volling and Belsky (1991) found that the more support fathers reported receiving between work and family roles, the more participants were observed to provide caregiving. Knowing highly involved fathers may support similar parenting behaviors in participants. West et al. (2009) found that almost half of participants named external circumstances as a factor in taking on the primary-caregiving role, including the local cultural setting, and a cultural shift towards more acceptance of fathers as primary-caregivers.

Based on these findings, it is likely that more involved fathers, in the form of primary-caregiving fathers, will report higher perceived social support for parenting from those close to them, including partners, relatives and friends, than less involved or secondary-caregiving fathers, despite anecdotal reports of negative reactions from strangers to primary-caregiving fathers.

Child characteristics

While many studies have assessed child characteristics, and their relationship to primary-caregiving fathers, paternal responsibility for childcare, and high father involvement, few conclusions can be drawn with any confidence.

Gender

Cooksey and Fondell (1996) found that fathers in families with only girls, or both girls and boys, were significantly less likely than fathers of only boys to take part in activities with their children. Conversely, child gender was not significantly correlated with father involvement in Rane and McBride (2000). In a sample of 156 families, Gaertner et al. (2007) found no differences by child's gender on father involvement or their parenting attitudes. No differences by child gender in father involvement is a finding that has been replicated in several studies (Hossain & Roopnarine, 1993; Pleck & Masciadrelli, 2004; Sanderson & Thompson, 2002)

Age and number of children

Having younger children and having a higher number of children reduced the amount of time fathers spent in activities with their children in Cooksey and Fondell (1996). Conversely, McBride and Mills (1993) found that having older children was related to less interaction by fathers. Higher numbers of children was significantly related to more traditional division of childcare in Van Dijk and Siegers (1996); increased number of children was significantly related to reduced time that fathers participated in childcare, and increased time mothers did. Having more children was related to less father involvement with infants in Gaertner et al., (2007).

A sample of 71 Australian families, including 'non-traditional' fathers shared childcare responsibility, or were the primary-caregiver for their children, and 'traditional', secondary-caregiving father families, reported that non-traditional families had, on average, fewer children (an average of 1.7 versus 2.3), and their children tended to be older (Russell, 1983). However, Merla's (2008) qualitative

analysis of Belgian primary-caregiving fathers found that the majority had two or more children, and that the decision for the father to stay at home was typically made when the child was a toddler.

Based on the lack of consistent findings in the literature, it is proposed that primary-caregiving fathers and secondary-caregiving fathers will not differ on reported child characteristics.

Parenting behavior

Parenting behavior of primary- and secondary-caregiving fathers has been found to differ. Frank's (1995) study of 44 primary-caregiving mother families and 49 primary-caregiving father families found significant differences in the childcare tasks undertaken by primary-caregiving fathers compared to secondary-caregiving fathers. Primary-caregiving fathers did not differ significantly from primary-caregiving mothers in the amount of childcare tasks performed, or number of hours worked, but were especially different in their parenting behaviour compared to secondary-caregiving fathers (Frank, 1995). As such, this study expects to find that primary-caregiving fathers report being more responsible for the care of their child than secondary-caregiving fathers.

Multiple determinants of primary caregiving

As previously described, research has identified that multiple factors influence primary caregiving. For example, the most recent study of primary-caregiving fathers, that of

West et al., (2009), found that various factors influenced fathers taking on the primary-caregiving role, including:

- 1) Financial, career and personality factors leading mothers toward paid or full-time employment;
- 2) Work variables of the father, including economic factors, work flexibility or dislike of current job;
- 3) External factors or ideological views discouraging parents away from external/non-familial childcare arrangements; and
- 4) Fathers' interest in or acceptance of the idea of providing childcare, often stemming from early life experiences, including their experience of being parented (West, et al., 2009).

From West et al.'s (2009) study, it is clear that a variety of factors come into the decision for fathers to become primary caregivers for children. Father involvement is also known to be influenced by many factors, including biological, cultural, economic, motivation, historical, legal, social policy, and the father's relationship with the child's mother (Lewis & Lamb, 2007). Multiple factors likely interact with one another over time. Research focused on the determinants and characteristics of highly involved fathers have identified multiple variables of interest, and it follows that primary caregiving would also have such varied causes, characteristics, and outcomes. As such, this study aims to assess a wide variety of variables, to account for the multitude of inter-related determinants of primary caregiving.

Methodology and gaps in the literature

Several criticisms can be made of the previous research as a whole. These include problems of design, measurement, relevance, defining of the topic area, and incomplete reporting of all variables of interest.

Definitions of what constitutes a primary-caregiving father have been variable in previous research; for example, some studies have characterized primary-caregiving fathers as fathers at home full-time, with an employed partner (Grbich, 1995; Pruett, 1987); requiring a certain number of hours of sole responsibility per week, during certain set times. Primary-caregiving has also been defined as “non-traditional” or “shared-caregiving” fathers in other studies (Gieger, 1996; Russell, 1989). Other studies have utilized median split techniques, or classified fathers who scored in the upper one third of the certain psychometrics as “primary-caregiving”, with no participant input. Many of these classifications or divisions are arbitrary, without any empirical basis. The use of variable definitions of primary caregiving fathers also ensures a wide variety of fathers have been classified under the label of “primary caregiving”, likely representing a wide variety of characteristics. This makes conclusions based on the previous literature difficult, and also means there is no consistent basis on which to define primary caregiving for the current study. These ways of defining primary caregiving may actually reflect high father involvement, rather than primary caregiving, reflecting an overlap in previous research.

For this study primary caregiving was defined in the same way as research by Radin (1981) and Bonney, Kelley and Levant (1999). Fathers were asked the percentage of time they are responsible for the care of their children, as well as the percentage of

time their partner is responsible for the care of their children. Participants were to nominate either themselves or their partner as the primary caregiver of their children. This method of defining primary caregiving is in line with previous research, and it also allows for participant input, and self-determination by participants of their own primary-caregiving status. Assessing percentage of time responsible acts as a validity check to ensure than primary-caregiving parents are responsible a greater amount of time than secondary-caregiving parents. This method of defining primary caregiving also fits with Nussbaum's (1985, cited in Callister, 1995) recommendation that it is most appropriate to use a relative scale of caregiving within families.

Most of the previous studies on primary caregiving fathers are not recent, with most conducted over a generation ago, and only a few studies (Merla, 2008; West, et al., 2009) being conducted within the last decade. The dated nature of much of the previous recent studies raises questions about how relevant the findings are to primary caregiving fathers today. There is also no available literature specific to the New Zealand context; New Zealand literature on the subject of primary caregiving fathers has taken the form of reviews, (Callister, 1995; Fursman & Callister, 2009), while studies have been conducted in Australia (Grbich, 1995; Harper, 1980; Russell, 1989), Israel (Sagi, 1982), Scandinavia (Lamb, et al., 1982), the United States (DeFrain, 1979; Frank, 1995; Gieger, 1996; Pruett, 1987; Radin, 1981) Canada (Doucet, 2004), Belgium (Merla, 2008) and the United Kingdom (West, et al., 2009).

Most of the previous research on this topic has consisted of exploratory studies, of a qualitative nature, without a sufficient comparison group, or often no comparison group at all. Recent research especially (Merla, 2008; West, et al., 2009) has not

included a comparison group. The focus on qualitative research methods has also come at the expense of reliable, valid measures, which have been rarely used in previous research. For example, in the area of marital relationship, participants in many studies were often asked to provide qualitative information; yet no psychometric instruments were used to provide accurate and reliable data, such as to assess differences over time, or differences between primary- and secondary-caregiving fathers, despite the widespread availability of such instruments. Many research questions in this area could benefit from the use of well-established psychometrics. The focus on father involvement from the 1980s, utilizing the definition of father involvement using Lamb's three criteria, i.e. interaction, accessibility and responsibility, has ensured that other areas of fathering have been ignored by researchers, including primary caregiving fathers (Russell, 1999).

Overall, the size of the studied samples has been small; for example, West (2009) and Grbich (1992) both recruited 25 participants, while Russell (1989) recruited 20; and Geiger (1996) recruited only 14. The small sample sizes call into question the validity and reliability of results. Studies have also not been consistent in providing relevant information about the characteristics of their participants, such as number of hours working (Radin, 1981; Sagi, 1982), as well as other characteristics, such as ethnicity, and income (Merla, 2008; West, et al., 2009). For example, Doucet (2004) recruited a relatively large number of primary caregiving fathers ($N = 70$), yet reported very little information about ethnicity, income, education, marital relationship, developmental history, or child characteristics. The lack of reported information makes it difficult to make accurate hypotheses for the current study, and represents a gap in the literature.

The current study

The current study makes three new and important contributions to the literature.

These include 1) the use of well-established and valid psychometrics utilized as part of a quantitative study, in an area where much of the previous research lacks reliable measurement and employs qualitative methodology; 2) the recruitment of a well-defined group of primary-caregiving fathers, as well as a valid comparison group of secondary-caregiving fathers, to allow for accurate and reliable comparisons to be made between and across groups, and 3) the use of regression analysis to identify any significant predictors of primary caregiving status, which has not been attempted in previous research.

Based on the findings of the relevant research reviewed previously, the following objectives are proposed:

Objective 1:

To compare primary-caregiving fathers and secondary-caregiving fathers on a range of assessed variables including developmental history, personal characteristics, marital relationship, work and economic factors, social network, and child characteristics.

Hypotheses:

1. Compared to secondary-caregiving fathers, primary-caregiving fathers will report differences on key variables, including:
 - a. Lower annual income.
 - b. A relationship with both of their parents with higher care.

- c. More non-traditional ideas about the role of the father in childcare.
- d. Higher parenting self-efficacy.
- e. Higher satisfaction in their relationship with their spouse or partner.
- f. Higher perceived social support for parenting.

2. Primary-caregiving fathers and secondary-caregiving fathers will not differ on assessed variables of:

- g. Personal characteristics of ethnicity and education.
- h. Child characteristics.

Objective 2:

To identify predictors of fathers' primary caregiving status.

Hypotheses:

1. Being a primary-caregiving father will be predicted by:
 - a. A relationship with both of their parents with higher care.
 - b. More non-traditional ideas about the role of the father in childcare.
 - c. Older age.
 - d. Higher parenting self-efficacy.
 - e. Higher satisfaction in their relationship with their partner.

Section 2: Method

Participants

Participants were fathers with a child or children aged under the age of five years, and who were currently living in a two-parent household with the other parent of their child or children. Participants were required to be able to read and write in English. Participants were also required to name either themselves, or their partner, as the primary caregiver of their child or children.

Similar to research by Radin (1981) and Bonney, Kelley and Levant (1999), fathers were asked the percentage of time they are responsible for the care of their children, as well as the percentage of time their partner is responsible for the care of their children. Participants who named themselves as the primary caregiver of their children made up the primary-caregiving father group, while participants who named their partner as the primary caregiver of their children made up the secondary-caregiving father group.

Recruitment

Participants were recruited through notices placed at parenting groups, local libraries, hospitals, cafes, workplaces, and childcare centres; advertisements placed in local newspapers; 'snowball' techniques where participants let other possible participants know about the study; and notices placed on websites aimed at fathers.

Advertisements can be seen in Appendices A, B, C and D.

Recruitment began in March 2010, and ended in November 2010. A total of 84 participants consented to participate, and 71 participants returned completed questionnaires. One participant was excluded due to missing data, and this gave a total of 70 participants. Of those 70, 35 participants indicated that they were the primary caregiver of their children, and 35 participants indicated that their partner was the primary caregiver of their children.

Power analyses were conducted for the planned t-tests for independent means, assuming an .80 power level, 0.05 alpha level and 1-tailed hypotheses. Assuming a small effect size (Cohen's $d = 0.2$), a minimum of 310 participants were required for each group; assuming a medium effect size (Cohen's $d = 0.5$), 51 participants were required for each group; and assuming a large effect size (Cohen's $d = 0.8$), 21 participants were required for each group.

Power analyses conducted for the planned logistic regression analyses were calculated based on the planned five predictor variables, .80 power level and 0.05 alpha level. Assuming a small effect size ($f^2=0.02$), a minimum of 643 participants were required; assuming a medium effect size ($f^2=0.15$), a minimum of 91 participants were required; and assuming a large effect size ($f^2=0.35$), a minimum of 43 participants were required.

While there are no previous studies to predict the likely effect size of this study, considering likely differences and practical limitations, this study aimed to recruit enough participants to ensure that a medium or a large effect size was detected by the statistical analyses. This study therefore attempted to recruit 102 participants, the

minimum required number for a medium effect size based on the planned t-tests and regression analyses. The recruited number of participants was lower than the power analysis recommended for a medium effect size, for a number of reasons, to be elaborated on further in the discussion.

Procedure

After responding via email or phone to the recruitment advertisement, fathers were posted a study information sheet, which can be seen in Appendix E. The information sheet described the aims of the study, as well as the study procedure and requirements for participants. It also described the confidential nature of any information provided, and participants' right to withdraw from the study at any time. The information sheet provided contact details for the primary investigator involved in the study, to allow participants to make contact about any questions or concerns.

Fathers who agreed to take part in the study were directed to a secure online website. At this website, participants were provided with a consent form, which can be seen in Appendix F. The consent form stated that participants had read the information sheet, had understood the requirements of the study, and understood that they could withdraw at any stage of the study. Submission of the online consent form represented consent to participate.

Following submission of the consent form, participants were able to access the online questionnaire and complete it. The online questionnaire consisted of questions about participant's developmental history, personal characteristics, marital relationship, work and economic factors, social network, and child characteristics. The full

questionnaire can be seen in Appendix G. Measured variables are described in detail in the following section.

After agreeing to participate, all participants were assigned an identification number. This number was attached to the submitted questionnaire, and ensured that all participants' responses remained anonymous. All electronically submitted consent forms were stored in a locked cabinet in a secure office at the University of Canterbury. At the University all consent forms, identifying participant information including addresses and names, and submitted questionnaires were separated.

As an incentive to participate, participants were posted a \$5.00 coffee voucher after submitting their completed online questionnaire. As a precaution against potentially fraudulent online completion of the questionnaire, all participants were asked to provide an address for the information sheet and voucher to be posted to. Only one individual per address was permitted to participate in this study, to avoid multiple online responding from individual participants.

This study was approved by the University of Canterbury Human Ethics Committee.

Measurement

Information collected as part of the online questionnaire included information about 1) developmental history, 2) personal characteristics, 3) marital relationship, 4) work and economic factors, 5) social network, and 6) child characteristics. The following section gives a description of each of the measures used.

Developmental history

Participants were asked if they had contact with their mother, or a similar mother figure, before the age of 16 years. If participants indicated that they had, they were then asked to complete the Parental Bonding Instrument (PBI) for that parent. If participants indicated that they had not, they were asked to continue to the next section. The next section then asked them if they had contact with their father, or a similar father figure, before the age of 16 years. If participants indicated that they had, they were then asked to complete the PBI for that parent. If participants indicated that they had not, they were asked to continue to the next section.

The Parental Bonding Instrument (PBI); (Parker, Tupling, & Brown, 1979)

All participants were asked about their experience of being parented by their mother and father using the care subscale of the Parental Bonding Instrument (PBI). The PBI is a 25-item self-report questionnaire, developed by Parker, Tupling and Brown (1979). Participants rate statements about their parents' behaviour during their first 16 years on a four-point Likert scale from 'very like' to 'very unlike'. Participants rated each parent separately.

Two factors were originally suggested to underlie the PBI, including 'care', the degree of affection, warmth and closeness, and 'protection', the degree to which parents allow autonomy and independence. For the purposes of this study, only the care subscale was used. Participants therefore were scored on a continuum from low care to high care for each parent. A sample item from the care subscale is whether the parent "spoke to me in a warm and friendly voice".

The PBI shows adequate internal consistency reliability, with test-retest reliability of $r = 0.76$ for the care subscale (Parker, et al., 1979). Other studies have found good internal consistency, with Cronbach's alphas for the Care subscale ranging from $r = 0.77$ to 0.93 (Brewin, Firth-Cozens, Furnham, & McManus, 1992; Fendrich, Weissman, Warner, & Mufson, 1990; Halik, Rosenthal, & Pattison, 1990). In non-clinical samples, 20-year stability of PBI measures ranged from $r = 0.59$ to 0.75 (Wilhelm & Parker, 1990). For the current sample, reliability coefficients were high, with Cronbach's alpha of $r = 0.93$ for the PBI care subscale for fathers, and $r = 0.94$ for the PBI care subscale for mothers.

Personal characteristics

The questionnaire asked participants a wide range of questions about their personal characteristics. Participants were asked to indicate their age, as well as their partner's age. Participants were asked to report their highest educational qualification, as well as their partner's, from a list of New Zealand qualifications. Participants were asked to indicate their ethnicity from a list provided, including Maori, New Zealand European/Pakeha, Pacific Islander, Asian, African/Middle Eastern and Other European. Participants were able to indicate that they belonged to multiple ethnic groups.

Role of the Father Questionnaire (ROFQ); (Palkovitz, 1984)

Participant's beliefs about the correct role of the father in childcare was measured by the Role of the Father questionnaire (ROFQ), a 15-item self-report measure designed by Palkovitz (1984) to measure non-traditional beliefs about the role of the father, and the extent to which a parent believes that fathers are important to child

development. Participants agree or disagree with items of a five-point scale. A sample item is “The most important thing a man can invest time and energy into is his family’ (Palkovitz, 1984). An adapted version was used in this study, replacing ‘infants’ with ‘young children’, as used by Christiansen and Palkovitz (1998).

The ROFQ has demonstrated good internal consistency, with Cronbach’s alpha of $\alpha = 0.73$ in a sample of 185 fathers of young children (Christiansen & Palkovitz, 1998). McBride and Rane (1996) also found good internal consistency, with Cronbach’s alpha of $\alpha = 0.77$. The ROFQ was assessed to have only one underlying structure, named as ‘paternal identity’ (Christiansen & Palkovitz, 1998). The ROFQ shows good validity, with significant correlations with measures of fathers’ involvement in child rearing, measures of marital intimacy, and psychosocial identity (Christiansen & Palkovitz, 1998; McBride & Rane, 1998; Palkovitz, 1984). The ROFQ had adequate internal consistency for the current sample, with Cronbach’s alpha of $\alpha = 0.66$.

The Parenting Sense of Competence scale (PSOC); (Johnston & Mash, 1989)

Participants’ sense of parenting self-efficacy and parenting satisfaction was measured with the Parenting Sense of Competence scale, a 17-item self-report scale developed by Johnston and Mash (1989). Participants rated statements on a six-point scale from ‘strongly disagree’ to ‘strongly agree’. Two factors are thought to underlie the PSOC, including ‘parenting satisfaction’, the degree to which the parent feels frustrated, anxious, and poorly motivated in the parenting role and ‘parenting self-efficacy’, the degree to which parent feels competent, capable of problem solving, and familiar with parenting (Johnston & Mash, 1989). A sample item is “Being a

good mother/father is a reward in itself". Participants' scores on the PSOC were divided along the two factors to create two scores for each participant – a parenting self-efficacy score and a parenting satisfaction score.

The PSOC shows good internal consistency and reliability (Ohan, Leung, & Johnston, 2000). In a study looking specifically at parenting self-esteem, satisfaction, and self-efficacy, Johnston and Mash (1989) assessed the psychometric properties of the PSOC in a sample of parents recruited from the community. Results indicated good internal consistency, with Cronbach's alpha of $\alpha = 0.79$ for the PSOC, $\alpha = 0.75$ for the satisfaction subscale, and $\alpha = 0.76$ for the efficacy subscale (Johnston & Mash, 1989). Ohan, Leung & Johnston (2000) assessed the reliability of the PSOC specifically for a group of fathers, and found good internal consistency on both subscales of the PSOC, with Cronbach's alpha of $\alpha = 0.77$ for the efficacy subscale, and $\alpha = 0.80$ for the satisfaction subscale. The current sample had adequate internal consistency, with Cronbach's alpha of $\alpha = 0.78$ for the efficacy subscale, and $\alpha = 0.74$ for the satisfaction subscale.

Marital relationship

Locke-Wallace Marital Adjustment Test (LWMAT); (Locke & Wallace, 1959)

Participant's relationship satisfaction with their partner was measured using the Locke-Wallace Marital Adjustment Test (LWMAT), a 15-item self-report measure of marital or relationship satisfaction. Locke and Wallace (1959) define marital adjustment as the extent to which a husband or wife accommodates to their partner at a given time. A sample item is 'When disagreements arise, they usually result in: a) husband giving in, b) wife giving in, c) agreement by mutual give and take' (Locke

& Wallace, 1959). Possible scores range from 0 to 158. Higher scores are associated with increased marital adjustment. In the original study by Locke and Wallace, the mean score for 'maladjusted' participants was 71.7, while the mean for well-adjusted participants was 158 (Locke & Wallace, 1959).

The Locke-Wallace Marital Adjustment Tests shows good internal consistency and reliability. Initial testing found reliability calculated by the Spearman-Brown split-half technique to be 0.90 (Locke & Wallace, 1959). In a sample of Muslim-American married couples, the Locke-Wallace MAT was found to have Cronbach's alpha of $\alpha = 0.79$ (Haque & Davenport, 2009). For the current sample, the LWMAT had adequate internal consistency, with Cronbach's alpha of $\alpha = 0.60$.

Work and economic Factors

Participants were asked to indicate if they were employed or self-employed, how many hours they worked per week, and their annual income. Participants were asked to indicate if their partner was employed, how many hours they worked per week, and their annual income.

Social network

Parenting Support Index (PSI); (DeGarmo, et al., 2008)

Perceived social support for parenting was measured by the Parenting Support Index (PSI), a 24-item self-report questionnaire developed by DeGarmo and Bryson (2000, cited in DeGarmo et al., 2008). On the PSI fathers report the amount of support received for their parenting on a five-point Likert scale from 'not at all/not

applicable' to 'a great deal'. Participants rate the amount of support given in four domains: practical parenting assistance, emergency child care, non-emergency child care, and financial parenting assistance. A sample item is 'help with doctor appointments'. Participants rate the amount of support given by partners, relatives, friends, and neighbours. The amount of support given by all four groups was summed to create a composite total social support score. Higher scores indicate more perceived social support for parenting (DeGarmo, et al., 2008).

Participants also rate how satisfied they are with the social support they are receiving on the PSI using the same five-point Likert scale, in the same four domains, and from the same groups of people. Higher scores indicate higher satisfaction with parenting support. The PSI shows good internal consistency and reliability data (DeGarmo, et al., 2008). In a study of 218 divorced fathers, with children aged between four and eleven, measured at two time points, the PSI showed good consistency, with Cronbach's alpha of $\alpha = 0.82$, and good test-retest consistency. The PSI also shows good validity: social support as measured by the PSI buffered against negative effects of parental conflict and role overload in DeGarmo, et al., (2008). For the current sample, internal consistency was adequate, with Cronbach's alpha of $\alpha = 0.77$ for the PSI Support subscale, and $\alpha = 0.92$ for the PSI Satisfaction subscale.

Child characteristics

Participants were asked how many children they had; as well as the ages and genders of each child.

Statistical analyses

T-tests for independent means were used to examine group differences. Chi-square analyses were used for comparisons on categorical variables. Correlational analyses were used to examine the relationship of variables of interest within the total sample. Logistic regression analyses were used to identify variables significantly predictive of primary care giving status. An alpha level of .05 was used for all statistical tests. Results were analysed using PASW Statistics – Windows version 18.

Section 3: Results

Sample Characteristics

A total of 84 fathers, in two-parent families, resident in New Zealand, with at least one child aged under the age of five (i.e. preschool children) consented to participate in the study, and 70 completed questionnaires were submitted, leaving total $N = 70$. The primary-caregiving father group (PCGFs) had a total $n = 35$, and the secondary-caregiving father group (SCGFs) had a total $n = 35$. These abbreviations will be used throughout this section.

Parenting behaviour

Time responsible for childcare

As expected, there were significant differences between PCGFs and SCGFs on time responsible for childcare, with PCGFs responsible for childcare for a significantly higher percentage of the time ($M = 60.46\%$, $SD = 24.46\%$) than SCGFs ($M = 41.71\%$, $SD = 24.77\%$), $t(68) = -3.185$, $p = .002$. Conversely, partners of PCGFs were responsible for childcare for a significantly lower percentage of the time ($M = 32.14\%$, $SD = 21.62\%$) than partners of SCGFs ($M = 73.37\%$, $SD = 15.56\%$), $t(68) = 9.158$, $p = .000$.

Table 1

Comparison of the percentage of time responsible for childcare, by primary caregiving fathers and their partners, and secondary caregiving fathers and their partners: means and standard deviations

Time responsible	Primary- caregiving fathers		Secondary- caregiving fathers		<i>p</i> value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Percentage of time father responsible	60.46	24.46	41.71	24.77	.002
Percentage of time mother responsible	32.14	21.62	73.37	15.56	.000

Note. Significant differences to $p < .05$ are highlighted in bold.

Developmental history

Table 2 shows participants' responses to the care subscale of the PBI. Significantly higher retrospectively-reported care by mother was reported by the PCGF group ($M = 27.29$, $SD = 7.14$) than by the SCGF group ($M = 22.69$, $SD = 10.95$), $t(58.45) = -2.082$, $p = .042$. Levene's test indicated unequal variances, so degrees of freedom were adjusted from 68 to 58.45. There was no significant difference between groups on care from both parents, though a trend for higher care in the PCGF group was observable ($t(68) = -1.795$, $p = .077$). There were no significant differences by group for care by father ($t(68) = -.870$, $p = .387$).

Table 2

Comparison of responses on the PBI, care subscale, for mother, father, and both parents, by primary- and secondary- caregiving fathers

Care	Primary- caregiving fathers		Secondary- caregiving fathers		<i>p</i> value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
PBI mother	27.29	7.14	22.69	10.95	.042
PBI father	21.34	9.96	19.37	8.99	.387
PBI total	48.63	14.76	42.06	15.85	.077

Note. PBI = Parental Bonding Instrument. Significant differences to $p < .05$ are highlighted in bold.

Chi-square analyses indicated no significant differences between the groups in the number of participants indicating that they did not have contact with their mother, or a similar mother figure in their first 16 years (PCGF $n = 0$ vs. SCGF $n = 2$; $\chi^2 (1, N = 70) = 2.059, p = .151$). No significant differences were found between groups in the number of participants reporting no contact with father, or a similar father figure in their first 16 years (PCGF $n = 2$ vs. SCGF $n = 1$; $\chi^2 (1, N = 70) = .348, p = .555$). No participants indicated that they did not have contact with either parent, or similar parental figures, in their first 16 years.

Personal characteristics

Table 3 illustrates the ethnicity and age characteristics of PCGFs and SCGFs.

Ethnicity

There were significant differences in the number of participants in each group belonging to NZ European or Pakeha ethnicity ($\chi^2 (1, N = 70) = 5.29, p = .022$); 33 (94.3%) of the SCGF group indicated that they identified with Pakeha ethnicity,

while only 26 (74.3%) of the PCGF group identified with Pakeha ethnicity. There were no group differences in the number of participants identifying with Maori ethnicity ($\chi^2 (1, N = 70) = .215, p = .643$), Pacific Island ethnicity ($\chi^2 (1, N = 70) = 1.02, p = .314$), Asian ethnicity ($\chi^2 (1, N = 70) = 2.06, p = .151$), African or Middle Eastern ethnicity ($\chi^2 (1, N = 70) = 1.01, p = .314$), or Other European ethnicity ($\chi^2 (1, N = 70) = .971, p = .324$). Therefore, significantly more SCGFs belonged to Pakeha ethnicity than PCGFs, and significantly more PCGFs belonged to an ethnic minority than SCGFs ($n = 9$ or 25.7% of PCGFs versus $n = 2$ or 5.7% of SCGFs).

Table 3

Comparison of ethnicity (number and percentage) of primary- and secondary-caregiving fathers

Ethnicity	Primary-caregiving fathers		Secondary-caregiving fathers		<i>p</i> value
	<i>n</i>	%	<i>n</i>	%	
NZ European/Pakeha	26	74.3	33	94.3	.022
Maori	2	5.7	3	8.6	.643
Pacific Islander	1	2.9	0	0	.314
Asian	2	5.7	0	0	.206
Other European	7	20.0	4	11.4	.324
Middle Eastern/African	1	2.9	0	0	.314
Belonging to ethnic minority	9	25.7	2	5.7	.022

Note. Significant differences to $p < .05$ are highlighted in bold.

Age

Age was not statistically significantly different between PCGFs and SCGFs. There was a trend ($p = .061$) for older age among the PCGF group ($M = 35.88$, $SD = 7.09$) compared to the SCGF group ($M = 32.65$, $SD = 6.77$; $t(65) = -1.908$, $p = .061$).

Education

Participant's educational qualifications are displayed in Table 4. Significantly more fathers in the PCGFs group had no qualifications than in the SCGF group ($\chi^2(1, n = 70) = 4.242$, $p = .039$). There were no significant differences between groups on how many fathers had School Certificate ($\chi^2(1, n = 70) = .348$, $p = .555$); Sixth Form Certificate ($\chi^2(1, n = 70) = .000$, $p = 1.000$); Bursary or University Entrance ($\chi^2(1, n = 70) = 1.061$, $p = .303$); an apprenticeship or trade qualification ($\chi^2(1, n = 70) = .850$, $p = .356$); a Polytechnic qualification ($\chi^2(1, n = 70) = .000$, $p = 1.000$); a University undergraduate qualification ($\chi^2(1, n = 70) = 2.283$, $p = .131$); Honours ($\chi^2(1, n = 70) = .000$, $p = 1.000$); Masters ($\chi^2(1, n = 70) = 1.061$, $p = .303$), or a PhD ($\chi^2(1, n = 70) = .000$, $p = 1.000$).

Educational qualifications of participant's partners are displayed in Table 5. No partners of participants did not have any educational qualifications. No significant differences by group were found on number of partners with School Certificate ($\chi^2(1, n = 70) = .348$, $p = .555$); Sixth form Certificate ($\chi^2(1, n = 70) = 1.148$, $p = .248$); Bursary or University Entrance ($\chi^2(1, n = 70) = .215$, $p = .643$); an apprenticeship or trade qualification ($\chi^2(1, n = 70) = .000$, $p = 1.000$); a Polytechnic qualification ($\chi^2(1, n = 70) = .467$, $p = .495$); a University undergraduate qualification ($\chi^2(1, n = 70) = .238$, $p = .626$); Honours ($\chi^2(1, n = 70) = .215$, $p = .643$); Masters ($\chi^2(1, n = 70) = .000$, $p = 1.000$), or a PhD ($\chi^2(1, n = 70) = .348$, $p = .555$).

Table 4

Comparison of highest educational qualifications across primary- and secondary-caregiving fathers: number and percentage

Education	Primary-caregiving fathers		Secondary-caregiving fathers		<i>p</i> value
	<i>n</i>	%	<i>n</i>	%	
No school qualifications	4	11.4	0	0	.039
NCEA Level 1/ School Certificate	2	5.7	1	2.9	.555
NCEA Level 2/ Sixth Form Certificate	1	2.9	1	2.9	1.000
NCEA Level 3/ Bursary	3	8.6	1	2.9	.643
Apprenticeship/ Trade qualification	5	14.3	8	22.9	.356
Polytechnic qualification	4	11.4	4	11.4	1.000
University undergraduate degree	9	25.7	15	42.9	.131
Honours degree	3	8.6	3	8.6	1.000
Masters degree	3	8.6	1	2.9	.303
PhD	1	2.9	1	2.9	1.000

Note. Significant differences to $p < .05$ are highlighted in bold.

Table 5

Comparison of highest educational qualifications of partners of primary caregiving fathers and partners of secondary caregiving fathers

Education	Partners of primary- caregiving fathers		Partners of secondary- caregiving fathers		<i>p</i> value
	<i>n</i>	%	<i>n</i>	%	
No school qualifications	0	0	0	0	-
NCEA Level 1/School Certificate	3	8.6	1	2.9	.555
NCEA Level 2/Sixth Form Certificate	3	8.6	6	17.1	.248
NCEA Level 3/Bursary	3	8.6	2	5.7	.643
Apprenticeship/Trade qualification	1	2.9	1	2.9	1.000
Polytechnic qualification	4	11.4	6	17.1	.495
University undergraduate degree	15	42.9	13	37.1	.626
Honours degree	2	5.7	3	8.6	.643
Masters degree	2	5.7	2	5.7	1.000

Beliefs about the role of the father

Participants' beliefs about the role of the father were extremely similar across groups, as can be seen in Table 6, and no significant groups differences were found in beliefs about the role of the father, as measured by the ROFQ, with $t(68) = .021$, $p = .984$.

Parenting self-efficacy and satisfaction

As can be seen in Table 6, PCGFs and SCGFs reported similar levels of parenting efficacy, with no significant differences across groups on self-reported parenting efficacy as measured by the PSOC efficacy subscale, with $t(68) = -1.287$, $p = .202$. No significant group differences were found on self-reported parenting satisfaction, as measured by the PSOC satisfaction subscale, with $t(68) = -.926$, $p = .358$.

Table 6

Comparison of responses by primary- and secondary- caregiving fathers on the ROFQ, PSOC efficacy and satisfaction subscales, and Locke-Wallace MAT

Variable	Primary caregiving fathers		Secondary caregiving fathers		<i>p</i> value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
ROFQ	61.57	5.94	61.60	5.58	.984
PSOC efficacy subscale	31.83	4.27	30.40	4.99	.202
PSOC satisfaction subscale	38.31	5.77	36.86	7.31	.358
Locke-Wallace MAT	108.57	19.74	113.77	23.26	.317

Note. ROFQ = Role of the Father Questionnaire, PSOC = Parenting Sense of Competence Scale, Locke Wallace MAT = Locke-Wallace Marital Adjustment Scale.

Marital relationship

As can be seen in Table 6, there were no significant differences between groups on reported marital satisfaction, as measured by the Locke-Wallace MAT, with $t(68) = .317, p = .317$.

Work and economic variables

PCGFs earned significantly less income in the past 12 months than SCGFs, with PCGFs earning an average of \$18,000, and SCGFs an average of \$57,486, as shown in Table 7 ($t(68) = -5.398, p = .000$). Partners of PCGFs earned significantly more than partners on SCGFs, with partners of PCGFs earning an average of \$51,714, and partners of SCGFs earning an average of \$17,517 ($t(54.061) = -4.817, p = .000$). Levene's test indicated unequal variances, so degrees of freedom were adjusted from 68 to 54.061. No significant difference in total household income between groups was found ($t(68) = .495, p = .622$).

PCGFs worked significantly less hours than SCGFs, with PCGFs working an average of 5.36 hours each week ($SD = 9.52$), and SCGFs an average of 37.44 hours each week ($SD = 15.45; t(68) = 10.458, p = .000$). Partners of PCGFs worked significantly more hours each week than partners of SCGFs, 32.79 hours ($SD = 18.77$) versus 5.74 hours ($SD = 9.83$). Levene's test indicated unequal variances, so degrees of freedom were adjusted from 68 to 51.387.

There was no significant difference between groups on the number of primary caregivers who were also currently employed ($\chi^2(1, N = 70) = .265, p = .607$).

Twelve PCGFs indicated that they currently work outside the home or work as self-

employed (34.3%), while 23 indicated they do not currently work (65.7%). Thirty-two SCGFs (91.4%) indicated that they currently work outside the home or work as self-employed, while three (8.6%) indicated that they were not currently working.

Twenty-seven PCGFs indicated that their partner currently works outside the home or works as self-employed (77.1%), while eight indicated that their partner does not (22.9%). Ten SCGFs (28.6%) indicated that their partner currently works outside the home or works as self-employed, while 25 (71.4%) indicated that their partner does not. Six PCGF families, and three SCGF families indicated that both parents were currently unemployed ($\chi^2 (1, N = 70) = 1.148, p = .284$).

Table 7
Comparison of primary- and secondary-caregiving fathers on economic variables of household income, participant's and partner's income and hours worked per week

Variable	Primary caregiving fathers		Secondary caregiving fathers		p value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Household income	\$69714.29	\$47797.27	\$75002.94	\$41333.80	.622
Participant income	\$18000.00	\$28837.02	\$57485.71	\$32266.01	.000
Average hours worked/week	5.36	9.52	37.44	15.45	.000
Partner income	\$51714.29	\$36465.59	\$17517.23	\$20835.31	.000
Average hours partner worked/week	32.79	18.77	5.74	9.83	.000

Note. Significant differences to $p < .05$ are highlighted in bold.

Social network

As shown in Table 8, there were no significant differences between groups on overall perceived social support for parenting, as measured by the PSI, support subscale ($t(68) = .210, p = .834$), or satisfaction with perceived social support for parenting, as measured by the PSI, satisfaction subscale ($t(68) = -.988, p = .327$).

Table 8

Comparison of responses by primary- and secondary- caregiving fathers to the PSI, support and satisfaction subscales

Variable	Primary caregiving fathers		Secondary caregiving fathers		<i>p</i> value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
PSI support	44.14	7.41	44.54	8.46	.834
PSI satisfaction	57.34	15.72	53.86	13.74	.327

Note. PSI = Parenting Support Index.

Child characteristics

There were no significant difference between groups in number of children ($t(68) = -.668, p = .506$). There were also no significant differences between groups on the number of female children in the household ($t(62) = -.385, p = .701$) or on the number of male children in the household ($t(62) = -.840, p = .408$), as can be seen in Table 9.

Table 9

Comparison of child characteristics of number of children and gender of children across primary- and secondary- caregiving father groups

Variable	Primary caregiving fathers		Secondary caregiving fathers		p value
	<i>n</i>	%	<i>n</i>	%	
One child	13	37.1	16	45.7	.404
Two children	17	48.6	15	42.9	.711
Three children	3	8.6	2	5.7	.667
Four children	2	5.7	2	5.7	.572
Female child in household	33	94.3	31	88.6	.701
Male child in household	33	94.3	31	88.6	.408

Predictors of primary caregiving status

Logistic regression analysis was used to identify any significant predictors of primary care giving status. Variables hypothesised to be associated with primary care giving status were entered as predictors into the model; independent variables entered into the logistic regression analysis included relationship with mother (as measured by the PBI-care subscale for mother), beliefs about the role of the father (as measured by the ROFQ), age, parenting efficacy (as measured by the PSOC, efficacy subscale), and relationship with partner (as measured by the Locke-Wallace MAT).

The overall percentage of cases correctly predicted by the model increased from 50.7% for the null model to 65.7% for the full model. As can be seen in Table 10 both age and sense of parenting efficacy were statistically significant predictors of primary care giving status. Older age was significantly predictive of increased likelihood of primary care giving; for every 1-year increase in age (where 1 year equalled 1 unit), the log-odds of primary care giving increased by .105 ($p = .023$, odds ratio = 1.110). Participant's parenting efficacy was significantly predictive of increased likelihood of primary care giving, as for each 1-unit increase on self-reported parenting efficacy, the log-odds of primary care giving increased by .162 ($p = .027$, odds ratio = 1.175).

Relationship with mother was not a significant predictor of primary caregiving, but did show an observable trend, with $p = .074$; for every 1-unit increase in reported care from mother, the log-odds of primary care giving increased by .060, holding all other independent variables constant, with an odds-ratio of 1.061.

Participant's beliefs about the role of the father were not significantly predictive of primary care giving status ($\beta = -.014$, $p = .796$, odds ratio = .986). Quality of participants' relationship with their partner was also not significantly predictive of primary care giving status ($\beta = -.013$, $p = .366$, odds ratio = .987).

Table 10

Summary of Logistic Regression analysis for variables predicting primary caregiving status by all participating fathers (N = 70)

Predictor	Primary caregiving status			
	β	SE β	e^{β}	p value
PBI mother	.060	.033	1.061	.074
ROFQ	-.014	.053	.986	.796
LWMAT	-.013	.014	.987	.366
Age	.105	.046	1.110	.023
PSOC efficacy	.162	.073	1.175	.027
Constant	-7.834			
χ^2		12.06		.034
df		5		

Note. *PBI* = Parenting Bonding Instrument, care subscale. *ROFQ* = Role of the Father Questionnaire. *LWMAT* = Locke-Wallace Marital Adjustment Questionnaire. *PSOC Efficacy* = Parenting Sense of Competence Scale, Efficacy subscale. β = log-odds units. e^{β} = exponentiated B. Primary caregiving status was coded as 1 for primary caregiving, and 0 for secondary caregiving. Significant predictors to $p < .05$ are highlighted in bold.

Section 4: Discussion

Two groups of predictions were made at the beginning of this study; the first focussed on comparisons of primary- and secondary-caregiving fathers, and the second on predictors of primary caregiving status. Findings from the current study will be discussed, and linked to previous research. Strengths and limitations of the study and future directions for research will also be discussed.

Summary of findings

Several significant differences between primary-caregiving fathers and secondary-caregiving fathers emerged. Significant differences between groups were found on an aspect of developmental history; primary-caregiving fathers rated their experience of being parented by their mother as having significantly more care than did secondary-caregiving fathers. Several personal characteristics were significantly different between groups: primary-caregiving fathers were more likely to identify with a non-Pakeha ethnicity, and less likely to identify with Pakeha ethnicity than secondary-caregiving fathers. Primary-caregiving fathers were also more likely to have no educational qualifications than secondary-caregiving fathers. Work and economic factors were another area of difference, as primary-caregiving fathers earned significantly less income than secondary-caregiving fathers, while more income was earned by partners of primary-caregiving fathers than partners of secondary-caregiving fathers. Two significant predictors of primary caregiving status emerged in a logistic regression analysis, as being a primary-caregiving father was significantly predicted by older age of fathers, and higher parenting self-efficacy.

Comparison of results with findings of previous research

Primary-caregiving fathers reported significantly higher care from their mothers than secondary-caregiving fathers, and while not significant, there was an observable trend in predicting primary caregiving by care from mother. This is similar to previous research (Merla, 2008; Pruett, 1987; Sagi, 1982; West, et al., 2009). The significant difference between primary- and secondary-caregiving fathers on reported care from mother is especially interesting when compared to previous research, which has placed most importance on participants' fathers, as no significant difference between groups on experienced care from their father, or both parents was found, contrary to hypotheses (Merla, 2008; Pruett, 1987; Sagi, 1982; West, et al., 2009). This may be because the vast majority of children in Western countries are raised in a household where a mother is the primary-caregiver, with fathers taking on a secondary-caregiving role (Marsiglio, et al., 2000). The most common variation to this pattern is a single-parent household, and in New Zealand, most children who live in single-parent families live with their mother (Statistics New Zealand, 1999). Given that the most common parenting experience of New Zealand fathers is being parented by a mother as a primary caregiver, it is logical that this relationship would have the greatest impact on participants' own parenting behavior, including taking on the primary-caregiving role for their own children.

The significantly higher number of primary-caregiving fathers who identified with an ethnic minority, compared to secondary-caregiving fathers, is also in line with previous research, which found that belonging to a minority ethnicity was related to increased time spent in childcare by fathers in a U.S. sample (Cooksey & Fondell, 1996). This could reflect the higher rate of unemployment among some ethnic

minorities in New Zealand, such as Maori and Pacific Island men (Statistics New Zealand, 2010), causing men from these ethnic groups to have more opportunity and impetus to take on the primary caregiving role.

Primary-caregiving fathers' increased likelihood of having no educational qualifications was also in line with some previous findings (Gaunt, 2005; Radin, 1981; Volling & Belsky, 1991). This could reflect limitations in obtaining full-time employment for men without any qualifications or trade training, with the resulting difficulties in obtaining work making primary-caregiving for children a more economically sensible and viable option. Primary-caregiving fathers did not significantly differ from secondary-caregiving fathers on total educational qualifications, similar to previous research (McBride, et al., 2005; Rane & McBride, 2000).

As hypothesized, there were significant differences in income between groups, as found in previous research (Lewis et al., 2008, as cited in West et al., 2009). This can likely be explained by the limitations on possible working hours that being a primary-caregiver for a pre-school aged child brings. As hypothesized, and also reported by previous research (Lamb, et al., 1982) primary-caregiving fathers did not significantly differ from secondary-caregiving fathers on child characteristics, including number of children and gender of children.

While it was hypothesized that primary-caregiving fathers and secondary-caregiving fathers would differ on beliefs, marital quality, and social support, contrary to previous findings (Gieger, 1996; Lamb, et al., 1982; Pleck & Masciadrelli, 2004;

Russell, 1989, 1999) primary-caregiving fathers did not differ significantly from secondary-caregiving fathers on any of these variables. There are several possible reasons for these results. This study was not able to recruit as many participants as a power analysis recommended for detection of small to medium effect sizes. Limitations in sample size may have resulted in non-significant results, especially if differences were of a small or medium effect size, as the current study would likely have been under-powered and failed to detect these differences as statistically significant.

There is a lack of consistent findings between studies in the area of primary-caregiving fathers due to variation in the demographic characteristics of sampled populations, studies being conducted at different time points since the 1980s, a lack of a consistent definition of primary caregiving, and inconsistent measurement of father involvement. Studies including McBride et al (2005) and Gaertner et al (2007) found that beliefs were not related to father involvement; findings that are in line with this study's results. No differences in marital satisfaction were found between primary-caregiving fathers and secondary-caregiving fathers in Russell's (1989) comparison of shared-caregiving and traditional fathers. Some variables including parenting satisfaction, parenting self-efficacy, perceived social support, and satisfaction with social support, have never been used as a basis of comparison between groups of primary- and secondary-caregiving fathers. Therefore, any hypotheses based on these variables are based on research which may not be wholly relevant for this population, due to the inherent differences in studies assessing father involvement among a large sample of secondary-caregiving fathers in a North-

American or European setting, and this study's focus on a smaller sample of primary-caregiving fathers in a New Zealand setting.

The measures used in this study may not have been sensitive enough to detect small differences between groups; for example, both groups have very similar mean scores on the Role of the Father Questionnaire (ROFQ), with little variance. While these measures have gained statistically significant results in previous studies, it may be that it is now normative for all fathers to rate themselves at the very high end of the ROFQ, no matter their primary-caregiving status. This may be due to the cultural context of this research, or it may represent a change in social values. A new instrument may need to be developed to assess more subtle differences between primary- and secondary-caregiving fathers in beliefs about the correct role of the father. Also, as much of the previous research on primary caregiving fathers was conducted a generation ago, and did not take place in New Zealand, results reported in much of the previous research may not be relevant.

There is also the possibility that primary-caregiving fathers and secondary-caregiving fathers truly do not differ on several of the assessed measures that resulted in statistically non-significant differences. It is likely that some of the non-significant differences between primary- and secondary-caregiving fathers, and non-significant predictors of primary-caregiving status truly represent variables that do not distinguish between these two groups, and are not truly predictive. Many of the previously reported differences between primary- and secondary-caregiving fathers may have been due to the qualitative methodologies used in many studies of primary-caregiving fathers (Merla, 2008; Radin, 1981; Russell, 1989, 1999; West, et al.,

2009). Differences in these studies were often identified through interviews, and methods such as grounded theory approaches. These same differences may not have been significant when assessed using this study's more rigorous quantitative analyses.

In this study, older age, and higher parenting self-efficacy were the only significant predictors of being a primary caregiving father for children. This is consistent with previous research of Jacobs and Kelley (2006), West et al. (2009) and Russell (1989). Having increased non-traditional beliefs about the role of the father and higher satisfaction in the marital relationship were not significant predictors in this study, contrary to hypotheses. A trend for increased care from mother on the Parental Bonding Instrument associated with primary-caregiving status was found, but this did not reach significance. Previous research utilizing regression analyses had found that time spent responsible for childcare by fathers was not predicted by age (Volling & Belsky, 1991) contrary to the current findings, but was predicted by parenting self-efficacy (Jacobs & Kelley, 2006), as also found in the current study. Unlike the current findings, marital relationship predicted parenting responsibility in Volling and Belsky (1991). Like the current findings, beliefs about fathering were not significant predictors in McBride et al (2005), and Jacobs and Kelley (2006). Older age may be associated with primary caregiving for several reasons; possible hypotheses include that older fathers may have greater leniency in work and economic circumstances that allow them to take time out of paid employment to care for children, without a resulting loss of potential earnings or job status when they return to the workplace. Their partners may also be older and further on in their careers, and so have greater earning potential, making it more economically viable

for the mother to continue to work. However, further research is required before any conclusions can be drawn. Efficacy is commonly related to increased involvement in childcare by fathers (Marsiglio et al., 2000), and fathers who feel that they are competent and capable are parents who are more likely to consider taking on the primary caregiving role. Being in the primary caregiving role may also increase parenting self-efficacy; greater experience with sole-charge parenting by fathers likely leads to the development of a wider variety of parenting skills and self-confidence.

A key reason that this study's findings differ from previous research may be that no previous research has attempted to identify predictors of being a primary-caregiving father, instead focusing on responsibility for childcare taken by secondary caregiving fathers. Differences in findings are likely to due to a focus in previous studies on father involvement, not primary caregiving. Most fathers in previous studies predicting father involvement were secondary caregivers, and the findings of these studies may not be applicable for all primary-caregiving fathers, as the constructs of primary caregiving and father involvement are not the same. Results reported in much of the previous research may not be totally relevant for this study's aims of predicting primary caregiving using regression analyses.

Theoretical implications of the current findings

This study represents the first time Belsky's theory of the determinants of parenting has been used to guide research into primary caregiving by fathers. Findings of this study implicate three areas associated with primary caregiving by fathers: developmental history, specifically relationship with mother; personal characteristics,

especially demographic variables of age, ethnicity and education; and work and economic factors, especially income of fathers. These findings raise the possibility that among the multiple determinants of parenting in Belsky's theory, some variables have a greater influence on parenting than others. The weighting of each variable and its relative importance may vary depending on the individual, or depending on the type of parenting. For example, parenting that is healthy and adaptive likely has very different determinants than parenting of an abusive nature (Belsky, 1984). However, the small sample size of this study, and some of the limitations of the measures used, may have prevented some of the determinants of parenting of Belsky's model from differentiating between primary and secondary caregiving fathers. Another possibility is that other models of parenting, may have differentiated more effectively between primary and secondary caregiving fathers.

Limitations of the current study

The current study has several limitations. Firstly, the cross-sectional design of this study has limitations, most notably that directionality of relationships is unable to be concluded with any certainty. The self-report method of collecting information also has limitations, such as the possibility of inaccurate or socially desirable responding. Self-report measures are open to participants presenting self in a more positive light than reality, as well as social desirability biases. However, the use of an anonymous and online survey method will likely cut down on socially desirable responding, more so than questionnaires involving participant-researcher interaction such as face-to-face interviewing, or a telephone interview. Future research could also include validity scales to partly address these issues. Participation in this study was also limited to people who were able to access the internet; figures indicate that in 2009

88% of households in New Zealand with dependent children had internet access (Statistics New Zealand, 2009). This means that approximately 12% of the population would be required to use internet access outside of their own home to participate in this study; future studies could provide internet access (such as internet usage vouchers) for parents without internet access in their home.

There may also be inaccuracies in the information provided about participating partners, as partners of participants were not surveyed in the current study. However, any inaccuracies are likely small, as previous research such as Jacobs and Kelley (2006) has found that fathers' reports of involvement, measured as engagement, accessibility, and responsibility for childcare, correlated highly with mothers' reports, as did fathers' reports of time spent as the primary caregiver.

Recruitment was stopped before the goal number of participants recommended by the power analysis was reached. This occurred for two reasons: firstly, there were difficulties in recruiting the number of participants recommended by the power analysis. Advertising for participants took place in local newspapers, via printed advertisements at local supermarkets, cafes, workplaces, hospitals, childcare centres, tertiary education providers, and libraries. Online advertising on popular websites such as trademe and facebook also took place, as well as on websites aimed at parents such as DIYFather.com. Despite this, fewer participants than were wanted were recruited. Secondly, time constraints related to thesis submission necessitated a fixed-date end to recruitment.

Another factor hindering recruitment was that participants typically knew no other primary-caregiving fathers to contact about the study. This meant that ‘snowball’ recruitment techniques typically used in other studies were not effective for this study. A lack of social groups involving fathers, such as parenting groups, playgroups, and organizations such as Plunket also hindered recruitment, as these organizations are typically used effectively in recruiting female primary caregivers. Existing support groups for fathers were targeted, including father support groups, such as Father and Child New Zealand, but these typically had few primary-caregiving members; rather, separated or secondary-caregiving but highly involved fathers were the norm. Problems with recruitment may have been due to the small number of primary-caregiving fathers in New Zealand. Primary-caregiving fathers may also be isolated from social support agencies, which typically focus their energies on mothers, and may be isolated from other parents, due to possible negative views about fathers in primary caregiving roles (Callister, 1995). This study could have been improved by recruitment of more participants, which may have resulted in significant results in some findings where differences between primary-caregiving fathers and secondary-caregiving fathers showed observable trends, but did not reach significance. More paid advertising, and recruitment over a longer period of time may have increased participant numbers.

Strengths of the current study

Compared to previous studies of primary-caregiving fathers, many of which lacked reliable measurement and which have used mainly qualitative research techniques, this study’s use of well-established and reliable psychometric instruments is a significant strength. The use of regression analysis to identify any significant

predictors of primary caregiving status is also a strength, and has never been attempted by another published study. This study also examines previously unexplored variables such as social network factors and work and economic variables. The recruitment of a well-defined group of primary-caregiving fathers, as well as a valid comparison group of secondary-caregiving fathers allowing for accurate and reliable comparisons to be made between and across groups is also a significant strength. This study also extends the father involvement literature, typically defined using Lamb's criteria of engagement, accessibility, and responsibility, to an understudied group of fathers.

Implications of the current findings and areas for future research

The findings of the current study support the assertion that primary caregiving fathers do spend more of their time responsible for caregiving than secondary caregiving fathers. Results also found that older age and being of non-Pakeha ethnicity are associated with primary caregiving status. This implies that men with certain personal characteristics are more likely to take on a primary caregiving role than others. Having no educational qualifications was also related to primary caregiving status; however this relationship applies to a small number of fathers in the primary caregiving group. It is likely that having no educational qualifications is related to a lowered earning potential, a factor associated with fathers taking on the primary caregiving role in previous studies (West, et al., 2009). The reasons behind age and ethnicity's association with primary caregiving can be hypothesized, but there is no empirical evidence to support these, and the possible reasons for the relationship are a suitable and logical focus for future research.

The current study finds that a man's experience of being parented by their mother, and specifically of experiencing higher levels of care, is associated with being a primary caregiver for their own children as an adult. It is probable that primary-caregiving fathers are emulating their own positive relationship with their primary-caregiving mother by being highly involved in the care of their children. It follows, therefore, that the mother-son relationship is an important target for intervention in encouraging future generations of men to be highly involved with their children. As it becomes increasingly socially acceptable for men to be nurturing and engaged parents who are highly involved in all aspects of their children's upbringing, men are freer to emulate a style of parenting traditionally associated with mothers: a caring, warm and supportive style of parenting. A positive relationship with their mother may make men more confident to raise children in such a manner. For children of primary-caregiving fathers, it may be that their father is their most important parenting role model. The parenting behavior of primary-caregiving fathers is then important, as it will impact their children's own parenting later in life. The parenting behavior of primary-caregiving fathers is then an important focus for support by social support providers and governmental agencies, as well as being an important focus for future research.

Findings of the current study also demonstrate that being a primary caregiver is related to significantly lower earnings than being in the secondary caregiver role. However, there were no differences in total household income between primary- and secondary-caregiving father groups, and this while of a small sample size, this study did not find evidence for an 'economic hit' involved in fathers taking on the primary caregiving role. Therefore, some New Zealand families may be able to have a father

take on primary caregiving responsibilities without an associated significant economic burden. As such, social support providers and governmental policy should be open to the possible benefits for families of primary caregiving by fathers, dependent on each family's individual circumstances, with relevant agencies being appropriately encouraging in the future.

Due to the correlational nature of this study, directionality of the relationship between parenting self-efficacy and primary caregiving is unclear. It may be that fathers higher in self-efficacy are more likely to become primary caregivers. It may also be that primary caregiving, with the associated increased experience in the parenting role, leads to higher parenting self-efficacy. Future studies should ideally be of a longitudinal nature, to assess causality effectively. There are various implications of these findings, including that increasing paternal parenting self-efficacy may increase numbers of fathers taking on the primary caregiving role, or that more experience of parenting by fathers may increase parenting self-efficacy, with numerous possible flow-on benefits for parenting satisfaction and effectiveness.

The lack of significant differences between primary-caregiving fathers and secondary-caregiving fathers on beliefs about the correct role of the father, with both groups reporting highly 'non-traditional' views about the father's correct role, could speak to a generational shift in beliefs about fathering and childcare. While primary-caregiving fathers are still a small percentage of the population, the majority of fathers, not just highly involved fathers, may view the role of the father as highly important, hence the very small variance within Role of the Father Questionnaire scores. If, as this study suggests, primary-caregiving fathers and secondary-

caregiving fathers are not very different from one another on beliefs about the role of the father, it raises questions about why more men do not take on the primary caregiving role. As this study finds that primary-caregiving fathers are not especially different on many of the variables previously thought to be distinctive of such fathers, such as beliefs, and marital quality. The characteristics and beliefs of men may not be the most important factor in fathers acting as the primary caregiver for children, as much previous research has theorized. Possible reasons for men not taking on more responsibility for childcare in New Zealand have been reviewed in depth in Fursman and Callister (2009), and include biological factors, such as breastfeeding, that ensure that men start parenthood in a secondary role; work and economic factors, such as inflexible workplace attitudes, and less support and paid parental leave for men wanting to take on a primary-caregiving role, as well as greater earnings of men, given the gender wage gap (Fursman & Callister, 2009). Other possible explanations include a lack of support for men as primary caregivers by social support providers, and in settings such as playgroups (Fursman & Callister, 2009). Women can also be a barrier to men participating fully in childcare; maternal gatekeeping behavior has been found in previous studies to impact on the amount of time men spend caring for their children (Allen & Hawkins, 1999; McBride, et al., 2005). Cultural and ideological beliefs about the acceptability of fathers as primary caregivers may also discourage men from taking on the primary-caregiving role. While this study found no significant difference between primary- and secondary-caregiving fathers' beliefs about the role of the father in childcare, it may be that beliefs about primary-caregiving, as well as possible negative reactions of others in the fathers' social network may be key in discouraging men from primary caregiving. To identify factors that encourage or discourage men from acting as the primary

caregiver for children, future research must look to other possible factors, including earning and employment factors, workplace attitudes and policies, women's beliefs and behaviours, and the policies of social support providers.

The current research provides several suggestions for future research. There is a need for a much larger study on primary caregiving fathers, as well as a study involving partners of primary-caregiving fathers. Future research would also benefit from a longitudinal design, and closer focus on work and economic characteristics of primary- and secondary-caregiving fathers.

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Appendix A

Newspaper Advertisement

Are you a stay-at-home dad?

The NZ Fathers of Young Children Study is looking for fathers who are the primary caregiver of their child, and who are willing to complete an online questionnaire. To participate, you must have at least 1 child aged under 5, and live with your child's other parent. You will receive a \$5 coffee voucher for your time. **Interested in participating?**
Email nz.father.study@gmail.com
or call Octavia on 3667001, extn. 7190.

Appendix B

Flyer Advertisement #1

Are you the father of a child under 5?



The NZ Fathers of Young Children Study is looking for fathers willing to fill out an online questionnaire. To participate, you must live with your child and your child's other parent. You will receive a \$5 coffee voucher for your time.

Interested? Call Octavia on 3667001, extn. 7190
Or email NZ.Father.Study@gmail.com

The NZ Fathers of Young Children Study is a Masters Thesis research study, run under the authority of the University of Canterbury Psychology Department.

Appendix C

Flyer advertisement #2

Are you a stay-at-home dad?



The NZ Fathers of Young Children Study is looking for fathers who are the primary caregiver of their child, and who are willing to complete an online questionnaire. To participate, you must have at least 1 child aged under 5, and live with your child's other parent. You will receive a \$5 coffee voucher for your time.

Interested? Call Octavia on 3667001, extn. 7190
Or email NZ.Father.Study@gmail.com

The NZ Fathers of Young Children Study is a Masters Thesis research study, run under the authority of the University of Canterbury Psychology Department.

Appendix D

Flyer advertisement #3

Are you a stay-at-home dad for some or all of the week?



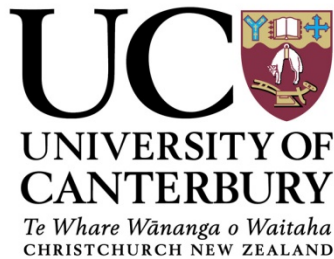
The NZ Fathers of Young Children Study is looking for fathers who are the primary caregiver of their child, and who are willing to complete an online questionnaire. To participate, you must have at least 1 child aged under 5, and live with your child's other parent. You will receive a \$5 coffee voucher for your time.

Interested? Call Octavia on 3667001, extn. 7190
Or email NZ.Father.Study@gmail.com

The NZ Fathers of Young Children Study is a Masters Thesis research study, run under the authority of the University of Canterbury Psychology Department.

Appendix E

Information Sheet



Department of Psychology

INFORMATION SHEET

You are invited to participate in the New Zealand Fathers of Young Children Study.

The aim of this project is to investigate differences between fathers who are the primary caregiver for their children, and fathers who are not the primary caregiver for their children.

Your involvement in this project will be to answer an online questionnaire, which will take around 30 minutes. You have the right to withdraw from the project at any time, including withdrawal of any information provided.

The results of the project may be published, but you may be assured of the complete confidentiality of data gathered in this investigation; the identity of participants will not be revealed to anyone. To ensure confidentiality, identifying details will be stored securely at the University of Canterbury, and will only be accessible to the primary investigator. Your contact details and name will also be kept separately from the data you provide as a participant.

The project is being carried out as a requirement for a Masters of Science by Octavia Wilson, under the supervision of Janet Carter, who can be contacted at the University of Canterbury, on 3667001 ext 7190. They will be pleased to discuss any concerns you may have about participation in the project. The results of this study will be published in a Masters of Science, which is a public document, available via the University of Canterbury Library Database.

The project has been reviewed and approved by the University of Canterbury Human Ethics Committee.

If you are interested in participating in this study, please go online to <http://psycdb.canterbury.ac.nz/limesurvey>, and choose 'New Zealand Fathers of Young Children Study' to begin participation, or contact Octavia Wilson on (03) 3667001 extension 7190 for more information.

Appendix F
Consent Form



Department of Psychology

CONSENT FORM

New Zealand Fathers of Young Children Study

I have read and understood the description of the above-named project. On this basis I agree to take part as a participant in the project, and I consent to publication of the results of the project with the understanding that confidentiality will be preserved. I understand that the results of this study will form the basis of a Masters of Science, a public document available via the University of Canterbury Library Database. I understand that my identity will not be revealed to anyone.

I understand also that I may at any time withdraw from the project, including withdrawal of any information I have provided.

I note that the project has been reviewed and approved by the University of Canterbury Human Ethics Committee.

NAME :

Please type your signature:

Date:

If you have any queries or concerns, please contact:
Octavia Wilson, Primary Investigator,
Department of Psychology, University of Canterbury
Phone: 3667001 ext 7190
21-01-10

Appendix G

Online questionnaire

Appendix 1: NZ Fathers of Young Children Study Online Questionnaire.

ONLINE PAGE 1 – Title page/Entry page to online questionnaire

ONLINE PAGE 2 – Consent form – to be submitted online

ONLINE PAGE 3 – Start of questionnaire.

Who is the primary caregiver of your children?

Myself

My partner

N. B. Primary caregiver refers to whoever spends the most time responsible for the care of your children.

What percentage of time are **you** responsible for the care of your child(ren)? _____

What percentage of time is **your partner** responsible for the care of your child(ren)? _____

Please indicate your:

Age: _____

Ethnicity: Maori

Asian

NZ European/Pakeha

African/Middle Eastern

Pacific Islander

Other European

Please indicate **your** highest level of education :

School Certificate/NCEA Level 1

Sixth Form Certificate/NCEA Level 2

Bursary/higher School Certificate/NCEA Level 3

Apprenticeship/Trade qualification

Polytechnic qualification

University undergraduate degree

Honours degree

Masters degree

PhD

Occupation/Previous occupation : _____

Do you currently work outside the home/work as self-employed? Y N

If yes, how many hours per week do you currently work? _____

How much income did you earn in the past 12 months? _____

Please indicate **your partner's** highest level of education:

School Certificate/NCEA Level 1

Sixth Form Certificate/NCEA Level 2

Bursary/higher School Certificate/NCEA Level 3

Apprenticeship/Trade qualification

Polytechnic qualification
University undergraduate degree
Honours degree
Masters degree
PhD

Partner's occupation/Previous occupation: _____

Does **your partner** currently work outside the home/work as self-employed? Y N
If yes, how many hours per week do they currently work? _____

How much income did **your partner** earn in the past 12 months? _____

How many children do you have? _____

Please indicate your children's ages and genders:

Child 1:	Age _____	Gender: _____
Child 2:	Age _____	Gender: _____
Child 3:	Age _____	Gender: _____
Child 4:	Age _____	Gender: _____

ONLINE PAGE 4 – Role of the Father Questionnaire

For the following questions place the number that indicates your feelings in the blank. Use the scale below. 1 = agree strongly

2 = agree moderately

3 = neither agree or disagree

4 = disagree moderately

5 = disagree strongly

-
- | | | | | | |
|--|---|---|---|---|---|
| 1. It is essential for the child's well being that fathers spend time interacting and playing with their children. | 1 | 2 | 3 | 4 | 5 |
| 2. It is difficult for men to express tender and affectionate feelings toward children. | 1 | 2 | 3 | 4 | 5 |
| 3. Fathers play a central role in a child's personality development. | 1 | 2 | 3 | 4 | 5 |
| 4. The responsibilities of fatherhood never overshadow the joys. | 1 | 2 | 3 | 4 | 5 |
| 5. Fathers are able to enjoy children more when the children are older and don't require so much care. | 1 | 2 | 3 | 4 | 5 |
| 6. Very young babies are generally able to sense an adult's moods and feelings. For example, a baby can tell when you are angry. | 1 | 2 | 3 | 4 | 5 |
| 7. Very young babies are affected by adults' moods and feelings. For example, if you are angry with a baby he/she may feel hurt. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|---|---|---|---|---|---|
| 8. The most important thing a man can invest time and energy into is his family. | 1 | 2 | 3 | 4 | 5 |
| 9. A father should be as heavily involved in the care of a child as the mother is. | 1 | 2 | 3 | 4 | 5 |
| 10. Mothers are naturally more sensitive caregivers than fathers are. | 1 | 2 | 3 | 4 | 5 |
| 11. Even when a child is very young it is important for a father to set a good example for his child. | 1 | 2 | 3 | 4 | 5 |
| 12. It is as important for a father to meet a child's psychological needs as it is for the mother to do so. | 1 | 2 | 3 | 4 | 5 |
| 13. It is important to respond quickly to a young child each time it cries. | 1 | 2 | 3 | 4 | 5 |
| 14. The way a father treats his baby in the first six months has important life-long effects on the child. | 1 | 2 | 3 | 4 | 5 |
| 15. All things considered, fatherhood is a highly rewarding experience. | 1 | 2 | 3 | 4 | 5 |

ONLINE PAGE 5 – Parenting Sense of Competence Scale

Listed below are a number of statements. Please respond to each item, indicating your agreement or disagreement with each statement in the following manner.

If you strongly agree, circle the letters SA

If you agree, circle the letter A

If you mildly agree, circle the letters MA

If you mildly disagree, circle the letter MD

If you disagree, circle the letter D

If you strongly disagree, circle the letter SD

1. The problems of taking care of a child or children are easy SA A MA MD D SD to solve once you know how your actions affect your child or children, an understanding I have acquired.

2. Even though being a parent could be rewarding, SA A MA MD D SD I am frustrated now that my child or children are at their present age.

3. I go to bed the same way I wake up in the morning – feeling that I have not accomplished a whole lot. SA A MA MD D SD

4. I do not know what it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated. SA A MA MD D SD

5. My father was better prepared to be a good father than I am. SA A MA MD D SD

6. I would make a fine role model for a new father to follow in order to learn what he would need to know in order to be a good parent.	SA	A	MA	MD	D	SD
7. Being a parent is manageable, and any problems are easily solved.	SA	A	MA	MD	D	SD
8. A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.	SA	A	MA	MD	D	SD
9. Sometimes I feel like I'm not getting anything done.	SA	A	MA	MD	D	SD
10. I meet my own personal expectations for expertise in caring for my child or children.	SA	A	MA	MD	D	SD
11. If anyone can find the answer to what is troubling my child or children, I am the one.	SA	A	MA	MD	D	SD
12. My talents and interests are in other areas, not in being a parent.	SA	A	MA	MD	D	SD
13. Considering how long I've been a father, I feel thoroughly familiar with this role.	SA	A	MA	MD	D	SD
14. If being a father were only more interesting, I would be motivated to do a better job as a parent.	SA	A	MA	MD	D	SD
15. I honestly believe I have all the skills necessary to be a good father to my child or children.	SA	A	MA	MD	D	SD
16. Being a parent makes me tense and anxious.	SA	A	MA	MD	D	SD

ONLINE PAGE 6 – Locke-Wallace Marital Adjustment Test

Please check the box on the scale line which best represent the degree of happiness, everything considered, or your present relationship. The middle point “happy” represents the degree of happiness which most people get from marriage or other relationships, and the scale gradually ranges on one side to those few who are very unhappy in their relationship, and on the other, to those few who experience extreme joy or felicity in their relationship.

1		2		3		4		5		6
	7									
Very						Happy				Perfectly
Unhappy										Happy

State the approximate extent of agreement or disagreement between you and your partner on the following items.

	Always Agree	Almost Always Agree	Occa- sionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
Handling Family Finances						
Matters of Recreation						
Demonstrations of Affection						
Friends						
Sex relations						
Conventionality (right, good, or proper conduct)						
Philosophy of Life						
Ways of dealing with in- laws						

Check one:

When disagreements arise, they usually result in: (a) you giving in__ (b) your partner giving in__ (c) agreement by mutual give and take __

Do you and your mate engage in outside interests together? (a) All of them__ (b) some of them_(c) very few of them (d) none of them__

In leisure time do you generally prefer: (a) to be "on the go" __ (b) to stay at home__?

Does your mate generally prefer: (a) to be "on the go" __ (b) to stay at home__ ?

Do you ever wish you had not begun a relationship with your partner? (a) Frequently__ (b) occasionally __ (c) rarely __ (d) never__

If you had your life to live over again, do you think you would: (a) be in a relationship with the same person__ (b) be in a relationship with a different person __ (c) not be in a relationship at all __ ?

Do you ever confide in your mate: (a) almost never __ (b) rarely __ (c) in most things __ (d) in everything __ ?

ONLINE PAGE 7 – Parental Bonding Instrument

MOTHER OR OTHER FEMALE CAREGIVER

Did you have contact with your mother, or a similar female caregiver or guardian before the age of 16 years? YES NO

If YES, please answer the 12 questions below.

This questionnaire lists various attitudes and behaviours of parents. As you remember your MOTHER in your first 16 years would you place a tick in the most appropriate box next to each question

- | | Very
like | Moderately
like | Moderately
unlike | Very
unlike |
|---|--------------|--------------------|----------------------|----------------|
| 1. Spoke to me in a warm and friendly voice | | | | |
| 2. Did not help me as much as I needed | | | | |
| 3. Seemed emotionally cold to me | | | | |
| 4. Appeared to understand my problems and worries | | | | |
| 5. Was affectionate to me | | | | |
| 6. Enjoyed talking things over with me | | | | |
| 7. Frequently smiled at me | | | | |
| 8. Did not seem to understand what I needed or wanted | | | | |
| 9. Made me feel I wasn't wanted | | | | |
| 10. Could make me feel better when I was upset | | | | |
| 11. Did not talk with me very much | | | | |
| 12. Did not praise me | | | | |

FATHER OR OTHER MALE CAREGIVER

Did you have contact with your father, or a similar male caregiver or guardian before the age of 16 years? YES NO

If YES, please answer the 12 questions below.

This questionnaire lists various attitudes and behaviours of parents. As you remember your FATHER in your first 16 years would you place a tick in the most appropriate box next to each question

- | | Very
like | Moderately
like | Moderately
unlike | Very
unlike |
|---|--------------|--------------------|----------------------|----------------|
| 1. Spoke to me in a warm and friendly voice | | | | |
| 2. Did not help me as much as I needed | | | | |
| 3. Seemed emotionally cold to me | | | | |
| 4. Appeared to understand my problems and worries | | | | |
| 5. Was affectionate to me | | | | |
| 6. Enjoyed talking things over with me | | | | |
| 7. Frequently smiled at me | | | | |

8. Did not seem to understand what I needed or wanted
9. Made me feel I wasn't wanted
10. Could make me feel better when I was upset
11. Did not talk with me very much
12. Did not praise me

ONLINE PAGE 8 – Parenting Support Index

Please think about the support you receive for parenting responsibilities from each of the people listed below. Using the following scale, please circle the number that best describes how much support you receive.

- 1 – Not at all
- 2 – A little
- 3 – Some
- 4 – A lot
- 5 – A great deal

When you need help regarding the child(ren), how much support do you receive from the following people for....

1. Childcare/Babysitting for you if you get sick, or if you need to attend a meeting or a class, work overtime, etc

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

2. Childcare/Babysitting if you just want some time away from the child(ren) to do something fun or relaxing

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

3. Practical Assistance or Parenting Advice, e.g. driving the child(ren) to/from daycare, school, scouts, camp, sports activities, referrals for doctors or help with doctors' appointments, etc

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

4. Financial Help like offering to pay for clothes, music lessons, vacations, etc., or by giving you their kids' hand-me-downs.

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

Please think about how satisfied you are with the support you receive from each of the people listed below. Using the following scale, please circle the number that best describes your level of satisfaction.

- 1 – Not at all
- 2 – A little
- 3 – Some
- 4 – A lot
- 5 – A great deal

When you need help regarding the child(ren), how satisfied are you with the support you receive from the following people for...

1. Childcare/Babysitting for you if you get sick, or if you need to attend a meeting or a class, work overtime, etc

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

2. Childcare/Babysitting if you just want some time away from the child(ren) to do something fun or relaxing

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

3. Practical Assistance or Parenting Advice, e.g. driving the child(ren) to/from daycare, school, scouts, camp, sports activities, referrals for doctors or help with doctors' appointments, etc

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

4. Financial Help like offering to pay for clothes, music lessons, vacations, etc., or by giving you their kids' hand-me-downs.

Partner	1	2	3	4	5
Relative(s)	1	2	3	4	5
Friend(s)	1	2	3	4	5
Neighbour(s)	1	2	3	4	5

ONLINE PAGE 9

Thank you for your participation in the New Zealand Fathers of Young Children Study.
The questionnaire is now complete.

Do you wish to receive a \$5 Coffee Culture voucher as a token of appreciation for participating?

YES

NO

Would you like to receive a copy of the study results once complete?

YES

NO

If you have answered YES to either of these questions, please enter your postal address below.

Postal address:

If you have any questions about this study, please feel free to contact the primary investigator, Octavia Wilson, on (03) 3667001 ext. 7190 or email NZ.Father.Study@gmail.com.

If participating in this study has raised any issues or concerns for you, please contact the supervising investigator **Dr. Janet Carter**, Clinical Psychologist on (03) 3642987 ext. 8090

Or otherwise contact one or more of the support providers below:

Lifeline: 3666743 (Christchurch area) or 0800 543 354

MensLine: 0800 636 754 or www.mensline.org.nz

Parent Help line: 0800 568 856